

=> fil reg

FILE 'REGISTRY' ENTERED AT 09:55:02 ON 28 JUL 2003

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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 25 JUL 2003 HIGHEST RN 555152-78-8

DICTIONARY FILE UPDATES: 25 JUL 2003 HIGHEST RN 555152-78-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> d l8 ide can tot

L8 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN

RN 282522-94-5 REGISTRY

CN 4H-Imidazo[4,5,1-ij]quinoline-2(1H)-thione, 5,6-dihydro-5-(methylamino)-, (5R)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C11 H13 N3 S . C4 H4 O4

SR CA

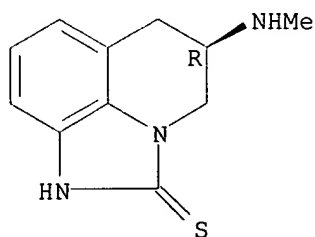
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

CM 1

CRN 282522-93-4

CMF C11 H13 N3 S

Absolute stereochemistry.



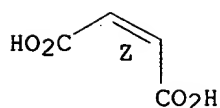
CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.

Jan Delaval  
Reference Librarian  
Biotechnology & Chemical Library  
CM1 1E07 - 703-308-4498  
[jan.delaval@uspto.gov](mailto:jan.delaval@uspto.gov)



6 REFERENCES IN FILE CA (1947 TO DATE)  
6 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:174924  
REFERENCE 2: 136:355238  
REFERENCE 3: 136:205395  
REFERENCE 4: 135:344486  
REFERENCE 5: 135:331428  
REFERENCE 6: 133:109946

L8 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN

RN 282522-93-4 REGISTRY

CN 4H-Imidazo[4,5,1-ij]quinoline-2(1H)-thione, 5,6-dihydro-5-(methylamino)-,  
(5R)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN (5R)-5-(Methylamino)-5,6-dihydro-4H-imidazo[4,5,1-ij]quinoline-2(1H)-  
thione

FS STEREOSEARCH

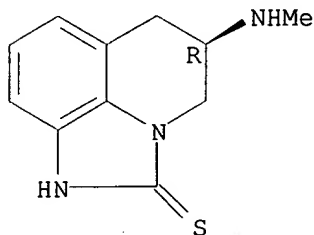
MF C11 H13 N3 S

CI COM

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

8 REFERENCES IN FILE CA (1947 TO DATE)  
8 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 138:78475  
REFERENCE 2: 138:78468  
REFERENCE 3: 137:174924  
REFERENCE 4: 136:355238  
REFERENCE 5: 136:205395

REFERENCE 6: 135:344486

REFERENCE 7: 135:331428

REFERENCE 8: 133:109946

L8 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN

RN 179386-44-8 REGISTRY

CN 4H-Imidazo[4,5,1-ij]quinolin-2(1H)-one, 5,6-dihydro-5-(methylamino)-, (5R)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 4H-Imidazo[4,5,1-ij]quinolin-2(1H)-one, 5,6-dihydro-5-(methylamino)-, (R)-, (Z)-2-butenedioate (1:1)

OTHER NAMES:

CN PNU 95666

CN PNU-95666E

CN U 95666E

FS STEREOSEARCH

DR 194919-11-4

MF C11 H13 N3 O . C4 H4 O4

SR CAS Registry Services

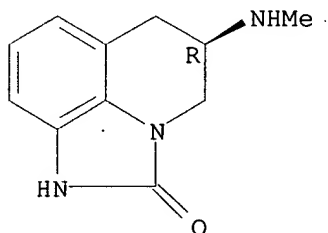
LC STN Files: BIOSIS, CA, CAPLUS, CASREACT, PHAR, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL

CM 1

CRN 179386-43-7

CMF C11 H13 N3 O

Absolute stereochemistry. Rotation (-).

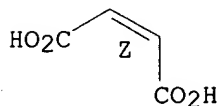


CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



20 REFERENCES IN FILE CA (1947 TO DATE)

20 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 139:63348

REFERENCE 2: 138:221518

REFERENCE 3: 138:198654

REFERENCE 4: 138:198652  
REFERENCE 5: 136:355238  
REFERENCE 6: 135:344486  
REFERENCE 7: 135:331428  
REFERENCE 8: 135:251990  
REFERENCE 9: 135:251988  
REFERENCE 10: 134:227362

L8 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN

RN 179386-43-7 REGISTRY

CN 4H-Imidazo[4,5,1-ij]quinolin-2(1H)-one, 5,6-dihydro-5-(methylamino)-,  
(5R)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 4H-Imidazo[4,5,1-ij]quinolin-2(1H)-one, 5,6-dihydro-5-(methylamino)-, (R)-

OTHER NAMES:

CN Sumanirole

FS STEREOSEARCH

DR 194919-10-3

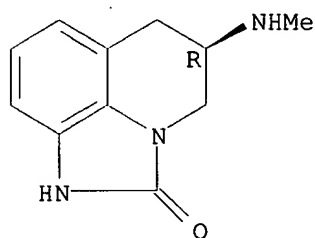
MF C11 H13 N3 O

CI COM

SR CAS Registry Services

LC STN Files: ADISINSIGHT, CA, CAPLUS, DRUGUPDATES, SYNTHLINE, TOXCENTER,  
USPAT2, USPATFULL

Absolute stereochemistry. Rotation (-).



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

11 REFERENCES IN FILE CA (1947 TO DATE)

12 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 138:395249  
REFERENCE 2: 138:78475  
REFERENCE 3: 136:355238  
REFERENCE 4: 136:205395  
REFERENCE 5: 135:344486  
REFERENCE 6: 135:331428  
REFERENCE 7: 133:164054

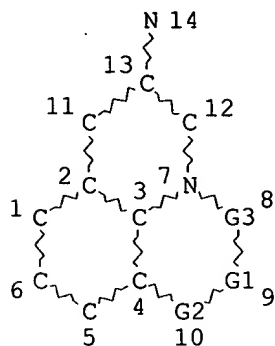
REFERENCE 8: 133:109946

REFERENCE 9: 130:272022

REFERENCE 10: 126:186021

=> d sta que 140

L38 STR



REP G1=(0-1) A

VAR G2=C/O/N

VAR G3=C/S/N

NODE ATTRIBUTES:

NSPEC IS RC AT 14

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 1

NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE

L40 319 SEA FILE=REGISTRY SSS FUL L38

100.0% PROCESSED 53332 ITERATIONS

319 ANSWERS

SEARCH TIME: 00.00.01

=> d his

(FILE 'HOME' ENTERED AT 09:13:29 ON 28 JUL 2003)

SET COST OFF

FILE 'HCAPLUS' ENTERED AT 09:13:44 ON 28 JUL 2003

L1 1 S US20020049206/PN  
SEL RN

FILE 'REGISTRY' ENTERED AT 09:14:01 ON 28 JUL 2003

L2 14 S E1-E14  
L3 3 S L2 AND NCNC2-NC5-C6/ES  
L4 38 S (179386-43-7 OR 282522-93-4)/CRN  
L5 1 S MALEIC ACID/CN  
L6 1 S 2-BUTENEDIOIC ACID/CN  
L7 2 S C4H4O4 AND L4  
L8 4 S L3,L7

FILE 'HCAPLUS' ENTERED AT 09:23:46 ON 28 JUL 2003

L9 26 S L8

L10 17 S (PNU OR U)() (95666 OR 95666E OR 95() (666 OR 666E OR 666 "E"))  
L11 30 S L9,L10  
L12 1 S L11 AND ADDICT?  
E DRUG DEPENDENCE/CT  
L13 8194 S E3,E4  
E E3+ALL  
L14 11975 S E3+NT  
E E10+ALL  
L15 40766 S E4,E3+NT  
E SUBSTANCE ABUSE/CT  
E E3+ALL  
L16 2052 S E2  
E ADDICTION/CT  
E WITHDRAWAL/CT  
E TOBACCO/CT  
E TOBACCO SMOKE/CT  
L17 16079 S E3-E9  
E E6+ALL  
L18 8814 S E1  
E E2+ALL  
L19 7652 S E2,E1+NT  
E ALCOHOLISM/CT  
L20 3450 S E3  
E E3+ALL  
L21 1072 S E5  
L22 2 S L11 AND L13-L21  
L23 1 S L22 NOT RESTLESS LEG

FILE 'REGISTRY' ENTERED AT 09:29:42 ON 28 JUL 2003

L24 2 S (NICOTINE OR ETHANOL)/CN

FILE 'HCAPLUS' ENTERED AT 09:29:49 ON 28 JUL 2003

L25 1 S L24 AND L11  
E ANDERSON R/AU  
L26 324 S E3,E44-E46  
E ANDERSON RICH/AU  
L27 54 S E4  
L28 29 S E51-E53  
E MCBRINN S/AU  
L29 2 S E5,E6  
E MC BRINN S/AU  
E MCBRIN S/AU  
E ROBERTSON D/AU  
L30 135 S E3,E31  
L31 148 S E51  
L32 166 S E76-E78  
E MARSHALL R/AU  
L33 233 S E3,E8  
E MARCHAL ROB/AU  
E MARSHALL ROB/AU  
L34 163 S E4,E8-E10  
L35 3 S L11 AND L26-L34  
L36 3 S L1,L12,L23,L35  
L37 20 S L11 AND (PD<=20000816 OR PRD<=20000816 OR AD<=20000816)

FILE 'REGISTRY' ENTERED AT 09:34:57 ON 28 JUL 2003

L38 STR  
L39 5 S L38  
L40 319 S L38 FUL  
SAV L40 VKIM929/A TEMP  
L41 STR L38  
L42 7 S L41 SAM SUB=L40  
L43 STR L41

L44 2 S L43 SAM SUB=L40  
L45 STR L43  
L46 5 S L45 SAM SUB=L40  
L47 52 S L43 FUL SUB=L40  
L48 67 S L45 FUL SUB=L40  
SAV TEMP L47 VKIM929A/A  
SAV TEMP L48 VKIM929B/A  
L49 119 S L47,L48  
L50 315 S L40 NOT L8

FILE 'HCAPLUS' ENTERED AT 09:50:30 ON 28 JUL 2003

L51 63 S L50  
L52 0 S L51 AND ADDICT?  
L53 2 S L51 AND L13-L21  
L54 2 S L51 AND L24  
L55 4 S L53,L54  
L56 2 S L55 AND (COCAIN? OR CANNABI?)  
L57 0 S L51 AND L26-L34  
L58 17 S L51 AND (ABUS? OR WITHDRAW? OR ?TOLER? OR DEPEND? OR INTOX? O  
L59 5 S L36,L56

FILE 'REGISTRY' ENTERED AT 09:55:02 ON 28 JUL 2003

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 09:55:37 ON 28 JUL 2003

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FILE COVERS 1907 - 28 Jul 2003 VOL 139 ISS 5

FILE LAST UPDATED: 27 Jul 2003 (20030727/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

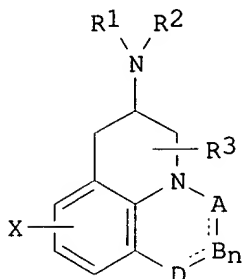
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L59 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN  
AN 2002:353281 HCAPLUS  
DN 136:355238  
TI Preparation of imidazoquinolines and phenylazacycloalkanes as treatments for restless legs syndrome  
IN **McBrinn, Sylvia; Anderson, Richard W.**  
PA Pharmacia & Upjohn Company, USA  
SO PCT Int. Appl., 30 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
IC ICM A61K031-445  
ICS A61K031-48; A61P019-00  
CC 28-9 (Heterocyclic Compounds (More Than One Hetero Atom))

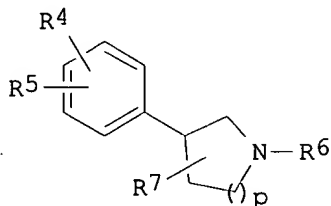
Section cross-reference(s): 1, 63

FAN.CNT 1

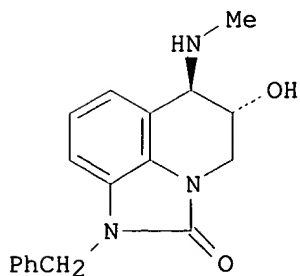
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002036123	A2	20020510	WO 2001-US27785	20011029
	WO 2002036123	A3	20020919		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002011226	A5	20020515	AU 2002-11226	20011029
	US 2002107257	A1	20020808	US 2001-39446	20011029
PRAI	US 2000-244666P	P	20001031		
	WO 2001-US27785	W	20011029		
OS	MARPAT 136:355238				
GI					



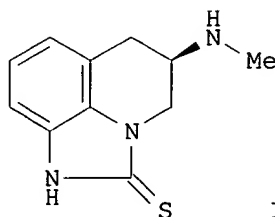
I



II



III



IV

AB Invention compds. I and II [R1-3 = H, alk(en/yn)yl, cycloalkyl, cycloalkyl or R1-2 are joined to form a cyclic amine; X = H, alkyl, halo, hydroxy, alkoxy, cyano, carboxamide, carboxy, carboalkoxyl; A = CH, CH2, CH-halo, CHCH3, C=O, C=S, C-SCH3, C=NH, C-NH2, C-NHCH3, C-NHCOOCH3, C-NHCN, SO2, N; B = CH2, CH, CH-halo, C=O, N, NH, N-CH3; n = 0-1; D = CH, CH2, CH-halo, C=O, O, N, NH, N-CH3; p = 0-3; R4-5 = H (provided only one is H at the same time), OH (provided R7 is other than hydrogen), CN, CH2CN, 2- or 4-CF3, CH2CF3, CH2CHF2, CH=CF2, (CH2)2CF3, ethenyl, 2-propenyl, OSO2CH3, OSO2CF3, SSO2CF3, COR7, COOR7, CON(R7)2, SOO-2CH3, SOO-2CF3, etc.; R6 = H, CF3, CH2CF3, alkyl, cycloalkyl, cycloalkylmethyl, alkenyl, alkynyl,



3,3,3-trifluoropropyl, 4,4,4-trifluorobutyl, etc.; R7 = H, CF3, CH2CF3, alkyl, cycloalkyl, cycloalkylmethyl, alkenyl, alkynyl, 3,3,3-trifluoropropyl, 4,4,4-trifluorobutyl, etc.] were prepd. For instance, (R)-Naproxen chloride (prepn. given) was coupled to 1-Benzyl-5-bromo-6-hydroxy-5,6-dihydro-4H-imidazo[4,5,1-ij]quinolin-2(1H)-one (prepn. given) and the resulting ester treated with MeNH2 in CH3CN to afford intermediate amino alc. III. III was converted to the aziridine via the benzenesulfonate and subsequently treated with Li/NH3 to effect debenzoylation and aziridine ring opening. The resulting amide was converted to thioamide IV (pyridine, P4S10, 125.degree.C, 5 h). I and II are useful for treating restless leg syndrome (RLS).

ST treatment restless leg syndrome imidazoquinoline quinoline imidazole prepn piperidine

IT Human

(prepn. of imidazoquinolines and phenylazacycloalkanes as treatments for restless legs syndrome)

IT 146798-66-5P 156907-84-5P 173590-06-2P 179386-43-7P  
179386-44-8P 282522-93-4P 282522-94-5P  
369595-93-7P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug; prepn. of imidazoquinolines and phenylazacycloalkanes as treatments for restless legs syndrome)

IT 105927-04-6P 227025-33-4P 269731-84-2P 282522-95-6P 282522-96-7P  
282522-98-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; prepn. of imidazoquinolines and phenylazacycloalkanes as treatments for restless legs syndrome)

IT 23979-41-1 83848-83-3, 4H-Imidazo[4,5,1-ij]quinolin-2(1H)-one

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; prepn. of imidazoquinolines and phenylazacycloalkanes as treatments for restless legs syndrome)

IT 179386-43-7P 179386-44-8P 282522-93-4P  
282522-94-5P

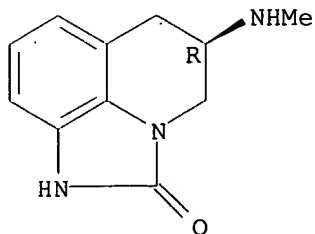
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug; prepn. of imidazoquinolines and phenylazacycloalkanes as treatments for restless legs syndrome)

RN 179386-43-7 HCAPLUS

CN 4H-Imidazo[4,5,1-ij]quinolin-2(1H)-one, 5,6-dihydro-5-(methylamino)-, (5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

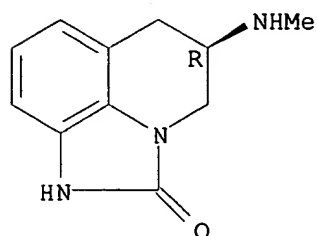


RN 179386-44-8 HCAPLUS

CN 4H-Imidazo[4,5,1-ij]quinolin-2(1H)-one, 5,6-dihydro-5-(methylamino)-, (5R)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CRN 179386-43-7  
CMF C11 H13 N3 O

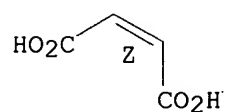
Absolute stereochemistry. Rotation (-).



CM 2

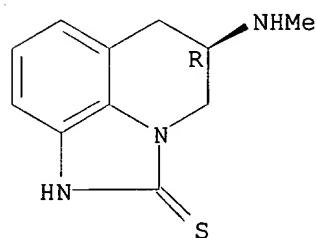
CRN 110-16-7  
CMF C4 H4 O4

Double bond geometry as shown.



RN 282522-93-4 HCAPLUS  
CN 4H-Imidazo[4,5,1-ij]quinoline-2(1H)-thione, 5,6-dihydro-5-(methylamino)-, (5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

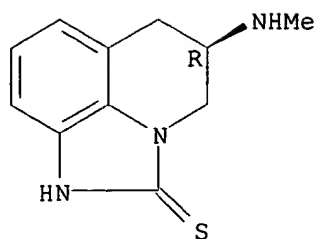


RN 282522-94-5 HCAPLUS  
CN 4H-Imidazo[4,5,1-ij]quinoline-2(1H)-thione, 5,6-dihydro-5-(methylamino)-, (5R)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 282522-93-4  
CMF C11 H13 N3 S

Absolute stereochemistry.

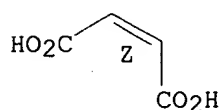


CM 2

CRN 110-16-7

CMF C4 H4 O4

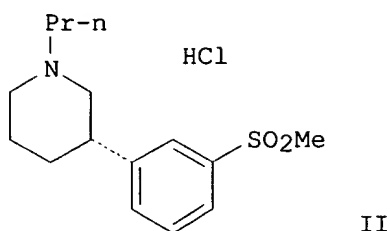
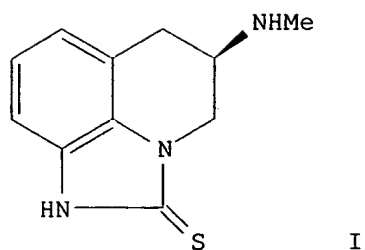
Double bond geometry as shown.



L59 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 2002:142501 HCAPLUS  
 DN 136:205395  
 TI Compounds for the treatment of **addictive** disorders  
 IN **Anderson, Richard W.; McBrinn, Sylvia S.;  
 Robertson, David W.; Marshall, Robert C.**  
 PA Pharmacia & Upjohn Company, USA  
 SO PCT Int. Appl., 39 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A61K031-00  
 CC 63-6 (Pharmaceuticals)  
 Section cross-reference(s): 1

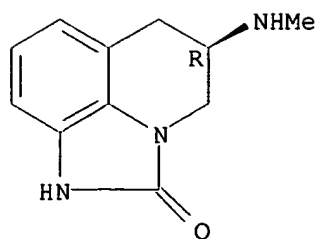
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002013807	A2	20020221	WO 2001-US25603	20010813
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001083393	A5	20020225	AU 2001-83393	20010813
US 2002049206	A1	20020425	US 2001-929666	20010814 <--
US 2003078273	A1	20030424	US 2002-295331	20021115
NO 2003000717	A	20030214	NO 2003-717	20030214
PRAI US 2000-225714P	P	20000816		
US 2001-263610P	P	20010123		
WO 2001-US25603	W	20010813		
US 2001-929666	A3	20010814		
OS MARPAT 136:205395				
GI				



- AB The treatment of **addictive** disorders, psychoactive substance use disorders, intoxication disorders, inhalation disorders, alc. **addiction**, tobacco **addiction**, and nicotine **addiction** using a heterocyclic amine, a phenylazacycloalkane, a cabergoline, or an arom. bicyclic amine active agent, or a pharmaceutically acceptable deriv. or salt of any said active agent is described. Example compds. are I and II.
- ST **addiction** disorder treatment; heterocyclic amine **addiction** disorder treatment; phenyl azacycloalkane **addiction** disorder treatment; cabergoline **addiction** disorder treatment
- IT **Drug dependence**  
**Tobacco smoke**  
 (compds. for the treatment of **addictive** disorders)
- IT Amines, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (heterocyclic; compds. for the treatment of **addictive** disorders)
- IT 54-11-5, Nicotine 64-17-5, Ethanol, biological studies  
 RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
 (compds. for the treatment of **addictive** disorders)
- IT 81409-90-7, Cabergoline 156907-84-5 170858-36-3 170858-41-0  
 173590-06-2 **179386-43-7 282522-93-4**  
**282522-94-5** 369595-93-7 400716-28-1 400716-30-5  
 400716-32-7  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (compds. for the treatment of **addictive** disorders)
- IT **179386-43-7 282522-93-4 282522-94-5**  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (compds. for the treatment of **addictive** disorders)
- RN 179386-43-7 HCAPLUS
- CN 4H-Imidazo[4,5,1-ij]quinolin-2(1H)-one, 5,6-dihydro-5-(methylamino)-,  
 (5R)- (9CI) (CA INDEX NAME)

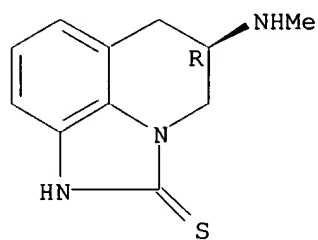
Absolute stereochemistry. Rotation (-).



RN 282522-93-4 HCAPLUS

CN 4H-Imidazo[4,5,1-ij]quinoline-2(1H)-thione, 5,6-dihydro-5-(methylamino)-,  
(5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 282522-94-5 HCAPLUS

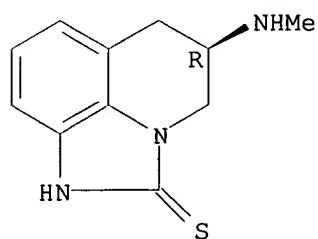
CN 4H-Imidazo[4,5,1-ij]quinoline-2(1H)-thione, 5,6-dihydro-5-(methylamino)-,  
(5R)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 282522-93-4

CMF C11 H13 N3 S

Absolute stereochemistry.

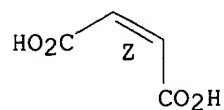


CM 2

CRN 110-16-7

CMF C4 H4 O4

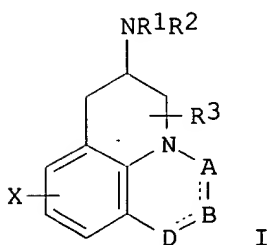
Double bond geometry as shown.



L59 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 2001:798221 HCAPLUS  
 DN 135:331428  
 TI Preparation of heterocyclic amines for treating fibromyalgia and chronic fatigue syndrome.  
 IN McCall, Robert B.; Marshall, Robert C.; Robertson, David W.; Ashley, Thomas M.  
 PA Pharmacia + Upjohn Company, USA  
 SO PCT Int. Appl., 34 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM C07D471-00  
 CC 28-9 (Heterocyclic Compounds (More Than One Hetero Atom))  
 Section cross-reference(s): 1, 27

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001081343	A2	20011101	WO 2001-US10807	20010417
	WO 2001081343	A3	20020228		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	US 2002004510	A1	20020110	US 2001-836660	20010417
	US 6448258	B2	20020910		
	EP 1274430	A2	20030115	EP 2001-926590	20010417
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	BR 2001010210	A	20030128	BR 2001-10210	20010417
	US 2002143010	A1	20021003	US 2002-159913	20020530
	US 6555548	B2	20030429		
PRAI	US 2000-198959P	P	20000421		
	US 2000-200569P	P	20000428		
	US 2001-836660	A3	20010417		
	WO 2001-US10807	W	20010417		
OS	MARPAT 135:331428				
GI					



AB Use of title compds., e.g., (I; R1-R3 = H, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, phenylalkyl; R1R2N = cyclic amine; X = H, alkyl, halo, OH, alkoxy, cyano, carboxamide, CO2H, carboalkoxy; A = CH, CH2, CHY, CHMe, CO, CS, CSMe, CNH2, SO2, N, etc.; B = null, CH2, CH, CHY,

CO, N, NH, NMe, O; D = CH, CH<sub>2</sub>, CHY, CO, O, N, NH, NMe; Y = halo) for prepn. of medicaments for the treatment of symptoms of fibromyalgia or chronic fatigue syndrome is claimed (no data). Thus, 4H-imidazo[4,5,1-ij]quinolin-2(1H)-one was converted in several steps to (5R)-5-methylamino-5,6-dihydro-4H-imidazo[4,5,1-ij]quinoline-2(1H)-thione in several steps.

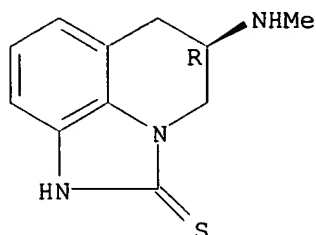
- ST heterocyclic amine prepn fibromyalgia chronic fatigue syndrome treatment; imidazoquinolinone prepn fibromyalgia chronic fatigue syndrome treatment; methylsulfonylphenylpropylpiperidine prepn fibromyalgia chronic fatigue syndrome treatment; cabergoline fibromyalgia chronic fatigue syndrome treatment
- IT Fatigue, biological  
(chronic fatigue syndrome, treatment; prepn. of heterocyclic amines for treating fibromyalgia and chronic fatigue syndrome)
- IT Muscle, disease  
(fibromyalgia, treatment; prepn. of heterocyclic amines for treating fibromyalgia and chronic fatigue syndrome)
- IT Amines, preparation  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(heterocyclic; prepn. of heterocyclic amines for treating fibromyalgia and chronic fatigue syndrome)
- IT **282522-93-4P**, (5R)-5-(Methylamino)-5,6-dihydro-4H-imidazo[4,5,1-ij]quinoline-2(1H)-thione **282522-94-5P**  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of heterocyclic amines for treating fibromyalgia and chronic fatigue syndrome)
- IT 81409-90-7, Cabergoline 156907-84-5 173590-06-2 **179386-43-7**  
**179386-44-8** 369595-93-7  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(prepn. of heterocyclic amines for treating fibromyalgia and chronic fatigue syndrome)
- IT 282522-97-8P  
RL: BYP (Byproduct); PREP (Preparation)  
(prepn. of heterocyclic amines for treating fibromyalgia and chronic fatigue syndrome)
- IT 269731-84-2P, (5R,6R)-1-Benzyl-5-hydroxy-6-(methylamino)-5,6-dihydro-4H-imidazo[4,5,1-ij]quinoline-2(1H)-one  
RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. of heterocyclic amines for treating fibromyalgia and chronic fatigue syndrome)
- IT 74-89-5, Methylamine, reactions 83848-83-3, 4H-Imidazo[4,5,1-ij]quinoline-2(1H)-one  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. of heterocyclic amines for treating fibromyalgia and chronic fatigue syndrome)
- IT 227025-33-4P, 1-Benzyl-4H-imidazo[4,5,1-ij]quinoline-2(1H)-one  
282522-96-7P 369595-91-5P, (5R,6R)-1-Benzyl-5-bromo-6-hydroxy-5,6-dihydro-4H-imidazo[4,5,1-ij]quinoline-2(1H)-one 369595-92-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. of heterocyclic amines for treating fibromyalgia and chronic fatigue syndrome)
- IT **282522-93-4P**, (5R)-5-(Methylamino)-5,6-dihydro-4H-imidazo[4,5,1-ij]quinoline-2(1H)-thione **282522-94-5P**  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of heterocyclic amines for treating fibromyalgia and chronic fatigue syndrome)

RN 282522-93-4 HCAPLUS

CN 4H-Imidazo[4,5,1-ij]quinoline-2(1H)-thione, 5,6-dihydro-5-(methylamino)-, (5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 282522-94-5 HCAPLUS

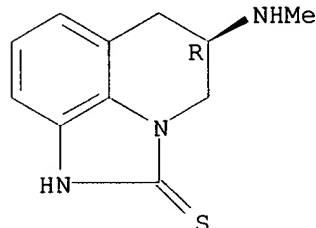
CN 4H-Imidazo[4,5,1-ij]quinoline-2(1H)-thione, 5,6-dihydro-5-(methylamino)-, (5R)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 282522-93-4

CMF C11 H13 N3 S

Absolute stereochemistry.

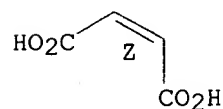


CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



IT 179386-43-7 179386-44-8

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

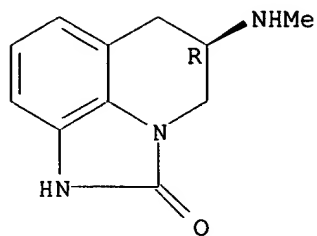
(prepn. of heterocyclic amines for treating fibromyalgia and chronic fatigue syndrome)

RN 179386-43-7 HCAPLUS

CN 4H-Imidazo[4,5,1-ij]quinolin-2(1H)-one, 5,6-dihydro-5-(methylamino)-, (5R)- (9CI) (CA INDEX NAME)



Absolute stereochemistry. Rotation (-).



RN 179386-44-8 HCAPLUS

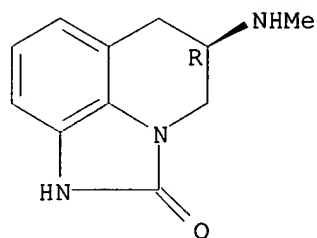
CN 4H-Imidazo[4,5,1-ij]quinolin-2(1H)-one, 5,6-dihydro-5-(methylamino)-, (5R)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 179386-43-7

CMF C11 H13 N3 O

Absolute stereochemistry. Rotation (-).

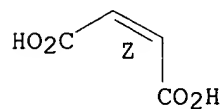


CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



L59 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1999:623743 HCAPLUS

DN 132:8911

TI Analysis of D2 and D3 Receptor-Selective Ligands in Rats Trained to Discriminate **Cocaine** from Saline

AU Garner, K. J.; Baker, L. E.

CS Department of Psychology, Western Michigan University, Kalamazoo, MI, USA

SO Pharmacology, Biochemistry and Behavior (1999), 64(2), 373-378

CODEN: PBBHAU; ISSN: 0091-3057

PB Elsevier Science Inc.

DT Journal

LA English

CC 1-11 (Pharmacology)

AB This study examd. the role of dopamine D3 receptors in the stimulus

generalization produced by 7-OH-DPAT and PD 128907 in rats trained to discriminate **cocaine** from saline. Twelve male Sprague-Dawley rats were trained to discriminate **cocaine** (10 mg/kg) from saline in a two-choice operant procedure using a FR20 schedule of water reinforcement. Stimulus generalization tests were administered with the D3-preferring agonists (.+-.)-7-OH-DPAT (0.01-0.3 mg/kg), (+)-7-OH-DPAT (0.01-0.3 mg/kg), and PD 128907 (0.01-0.3 mg/kg), and the selective D2 agonist PNU-39156 (0.01-0.3 mg/kg). Complete generalization to **cocaine** was obsd. with (.+-.)-7-OH-DPAT at doses that markedly suppressed response rate. Only partial stimulus generalization was obsd. with (+)-7-OH-DPAT and PD 128907 when these compds. were administered i.p., although s.c. injections of these compds. produced complete substitution. Response rate was also significantly reduced by these compds. The selective D2 agonist, PNU-91356 also fully substituted for the **cocaine** cue and suppressed response rate in a dose-dependent manner. To ascertain the importance of D3 receptor actions in the stimulus generalization produced by (.+-.)-7-OH-DPAT (0.1 mg/kg) and PD-128907 (0.3 mg/kg), the fairly selective D3 antagonist, PNU-99194A (2.5-20 mg/kg) was also tested in combination with these compds. Although PNU-99194A partially attenuated the stimulus generalization produced by (.+-.)-7-OH-DPAT, it failed to block PD-128907 substitution for **cocaine**. These results indicate at least some involvement of D3 receptors in the stimulus effects of (.+-.)-7-OH-DPAT, although further investigations are clearly warranted. The present results also suggest that the cue properties of **cocaine** may be dissocd. from the locomotor activating effects of this drug, because D3/D2 receptor agonists suppress locomotor activity but produce stimulus generalization to **cocaine**.

ST D2 D3 receptor ligand **cocaine** discrimination

IT Dopamine agonists

Dopamine antagonists

#### Drugs of abuse

(D2 and D3 receptor-selective ligands in rats trained to discriminate **cocaine** from saline)

IT Dopamine receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(D2; D2 and D3 receptor-selective ligands in rats trained to discriminate **cocaine** from saline)

IT Dopamine receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(D3; D2 and D3 receptor-selective ligands in rats trained to discriminate **cocaine** from saline)

IT Behavior

(drug-discriminating; D2 and D3 receptor-selective ligands in rats trained to discriminate **cocaine** from saline)

IT Behavior

(locomotor; D2 and D3 receptor-selective ligands in rats trained to discriminate **cocaine** from saline)

IT 50-36-2, **Cocaine**

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)

(D2 and D3 receptor-selective ligands in rats trained to discriminate **cocaine** from saline)

IT 74938-11-7, (.+-.)-7-OH-DPAT 82730-72-1, (+)-7-OH-DPAT 83598-46-3, PNU-99194A 123594-64-9, PD 128907 162616-64-0, PNU 91356

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(D2 and D3 receptor-selective ligands in rats trained to discriminate **cocaine** from saline)

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Acri, J; Eur J Pharmacol 1995, V281, PR7 HCAPLUS

(2) Baker, L; Behav Pharmacol 1993, V4, P69 HCAPLUS

(3) Baker, L; Behav Pharmacol 1997, V8, P243 HCAPLUS

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- (8) Caine, S; Behav Pharmacol 1995, V6, P333 HCAPLUS
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- (26) Roberts, D; Clin Neuropharmacol 1995, V18, PS84
- (27) Smith, A; Psychopharmacology (Berlin) 1995, V120, P93 HCAPLUS
- (28) Speakman, R; J Pharmacol Exp Ther 1991, V258, P945 HCAPLUS
- (29) Speakman, R; J Pharmacol Exp Ther 1996, V278, P1128 HCAPLUS
- (30) Varty, G; Eur J Pharmacol 1997, V339, P101 HCAPLUS
- (31) Waters, N; J Neural Transm 1993, V94, P11 HCAPLUS
- (32) Witkin, J; J Pharmacol Exp Ther 1991, V257, P706 HCAPLUS

IT 162616-64-0, PNU 91356

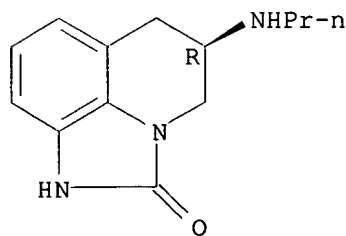
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(D2 and D3 receptor-selective ligands in rats trained to discriminate cocaine from saline)

RN 162616-64-0 HCAPLUS

CN 4H-Imidazo[4,5,1-ij]quinolin-2(1H)-one, 5,6-dihydro-5-(propylamino)-, monohydrochloride, (5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

L59 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1995:559561 HCAPLUS

DN 123:47383

TI Common **cannabimimetic** pharmacophoric requirements between aminoalkyl indoles and classical **cannabinoids**

AU Xie, Xiang-Qun; Eissenstat, Michael; Makriyannis, Alexandros

CS Dep. Pharmaceutical Sciences, School Pharmacy, Storrs, CT, 06269, USA

- SO Life Sciences (1995), 56(23/24), 1963-70  
CODEN: LIFSAK; ISSN: 0024-3205
- PB Elsevier
- DT Journal
- LA English
- CC 1-3 (Pharmacology)
- AB Aminoalkylindoles (AAIs) are structurally dissimilar from the classical **cannabinoids** (CCs); however, both AAIs and CCs appear to bind at the same site on the **cannabinoid** receptor. To obtain better insights on the structural correlation between AAIs and CCs, the authors have studied the conformational properties of the potent **cannabimimetic** AAI WIN 5521-2 and its inactive analogs using high resoln. 2D NMR spectroscopy in combination with computer-assisted mol. modeling. The pharmacophoric similarities between the AAIs and the CCs were then investigated using superimposition techniques. The abs. stereochemistries of the biol. active enantiomer (-)-9.beta.-hydroxyhexahydrocannabinol [(-)-(HHC)] were used as superimposition points and considered as internal controls to test the mol. principles guiding this expt. The results show that the model is congruent with a superimposition in which the naphthoyl, morpholino and 3-keto groups in the AAI, resp. correspond to the side chain, cyclohexanol OH and phenolic OH of HHC. A good fit is obtained when the two biol. active antipodes are superimposed. Conversely, the fit is poor if the inactive AAI enantiomer is superimposed on the active HHC enantiomer. It can also be seen that in such an orientation a certain deviation of the C-ring from the plane of the phenol ring of the tricyclic HHC component and of the morpholinyl portion from the plane of the indole ring of WIN 55212-2 is essential for **cannabimimetic** activity. The inactive enantiomer WIN 55212-3 has its resp. components aligned in the opposite quadrant. By comparing the stereoelectronic features of representative AAIs and CCs, the authors have developed a model which may help to uncover the pharmacophoric requirements of the AAIs and serve as a basis for future SAR and drug design.
- ST **cannabimimetic** activity aminoalkylindole **cannabinoid** pharmacophore
- IT Conformation and Conformers  
Pharmacophores  
(common **cannabimimetic** pharmacophoric requirements between aminoalkyl indoles and classical **cannabinoids** for **cannabimimetic** activity)
- IT **Cannabinoids**  
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)  
(common **cannabimimetic** pharmacophoric requirements between aminoalkyl indoles and classical **cannabinoids** for **cannabimimetic** activity)
- IT **Cannabinoid** receptors  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(common **cannabimimetic** pharmacophoric requirements between aminoalkyl indoles and classical **cannabinoids** for **cannabimimetic** activity)
- IT Molecular structure-biological activity relationship  
(**cannabinoid**, common **cannabimimetic** pharmacophoric requirements between aminoalkyl indoles and classical **cannabinoids** for **cannabimimetic** activity)
- IT Receptors  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(**cannabinoid**, common **cannabimimetic** pharmacophoric requirements between aminoalkyl indoles and classical **cannabinoids** for **cannabimimetic** activity)

IT 59685-28-8 92623-83-1, Pravadoline 131543-22-1, WIN 55212-2  
131543-24-3, WIN 55212-3 137794-89-9 164324-23-6  
164324-24-7

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)

(common **cannabimimetic** pharmacophoric requirements between aminoalkyl indoles and classical **cannabinoids** for **cannabimimetic** activity)

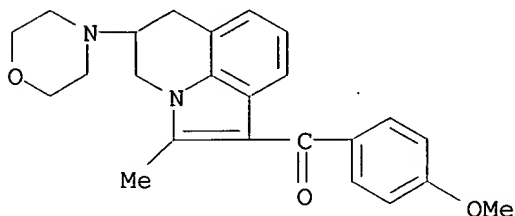
IT 137794-89-9 164324-23-6 164324-24-7

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)

(common **cannabimimetic** pharmacophoric requirements between aminoalkyl indoles and classical **cannabinoids** for **cannabimimetic** activity)

RN 137794-89-9 HCAPLUS

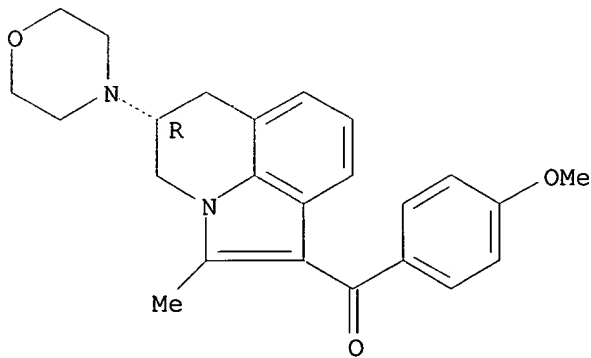
CN Methanone, [5,6-dihydro-2-methyl-5-(4-morpholinyl)-4H-pyrrolo[3,2,1-ij]quinolin-1-yl](4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 164324-23-6 HCAPLUS

CN Methanone, [5,6-dihydro-2-methyl-5-(4-morpholinyl)-4H-pyrrolo[3,2,1-ij]quinolin-1-yl](4-methoxyphenyl)-, (R)- (9CI) (CA INDEX NAME)

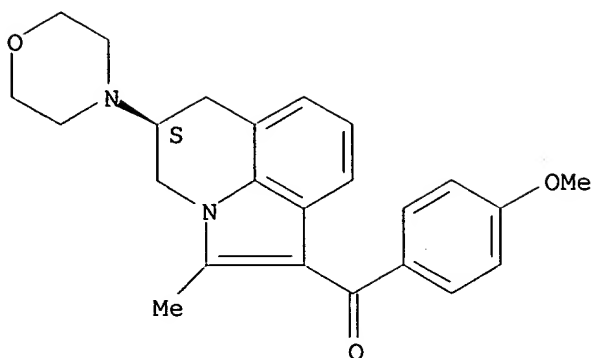
Absolute stereochemistry.



RN 164324-24-7 HCAPLUS

CN Methanone, [5,6-dihydro-2-methyl-5-(4-morpholinyl)-4H-pyrrolo[3,2,1-ij]quinolin-1-yl](4-methoxyphenyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> fil reg

FILE 'REGISTRY' ENTERED AT 10:02:03 ON 28 JUL 2003  
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 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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Property values tagged with IC are from the ZIC/VINITI data file  
 provided by InfoChem.

STRUCTURE FILE UPDATES: 25 JUL 2003 HIGHEST RN 555152-78-8  
 DICTIONARY FILE UPDATES: 25 JUL 2003 HIGHEST RN 555152-78-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when  
 conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

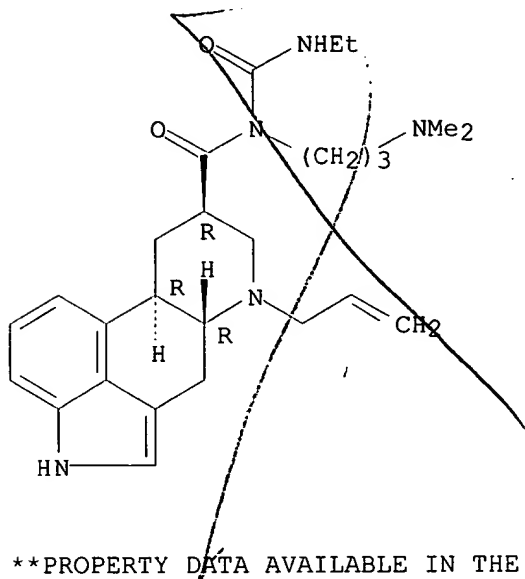
Experimental and calculated property data are now available. See HELP  
 PROPERTIES for more information. See STNote 27, Searching Properties.  
 in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> d 170 ide can tot

L70 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN **81409-90-7** REGISTRY  
 CN Ergoline-8-carboxamide, N-[3-(dimethylamino)propyl]-N-  
 [(ethylamino)carbonyl]-6-(2-propenyl)-, (8.beta.)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Indolo[4,3-fg]quinoline, ergoline-8-carboxamide deriv.  
 OTHER NAMES:  
 CN Cabaser  
 CN Cabergoline  
 CN Dostinex  
 CN Galastop  
 CN Sogilen  
 FS STEREOSEARCH  
 MF C26 H37 N5 O2  
 CI COM  
 LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*,  
 BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB,  
 CIN, CSCHEM, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES,  
 EMBASE, IPA, MEDLINE, MRCK\*, PHAR, PHARMASEARCH, PROMT, RTECS\*,

SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL, VETU  
(\*File contains numerically searchable property data)  
Other Sources: WHO

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

201 REFERENCES IN FILE CA (1947 TO DATE)  
3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
201 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 139:34107  
REFERENCE 2: 139:31169  
REFERENCE 3: 139:30378  
REFERENCE 4: 139:29930  
REFERENCE 5: 139:17440  
REFERENCE 6: 139:828  
REFERENCE 7: 139:517  
REFERENCE 8: 138:348541  
REFERENCE 9: 138:343889  
REFERENCE 10: 138:343854

L70 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 64-17-5 REGISTRY  
CN Ethanol (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Ethyl alcohol (6CI, 7CI, 8CI)  
OTHER NAMES:  
CN 100C.NPA  
CN AHD 2000  
CN Alcare Hand Degermer  
CN Alcohol

CN Alcohol anhydrous  
CN Algrain  
CN Anhydrol  
CN Anhydrol PM 4085  
CN Desinfektol EL  
CN Duplicating Fluid 100C.NPA  
CN Esumiru WK 88  
CN Ethicap  
CN Ethyl hydrate  
CN Ethyl hydroxide  
CN Hinetoless  
CN IMS 99  
CN Jaysol  
CN Jaysol S  
CN Lux  
CN Methylcarbinol  
CN Molasses alcohol  
CN Potato alcohol  
CN SDA 3A  
CN SDA 40-2  
CN Sekundasprit  
CN SY Fresh M  
CN Synasol  
CN Tecsol  
CN Tecsol C  
FS 3D CONCORD  
DR 8000-16-6, 8024-45-1, 121182-78-3  
MF C2 H6 O  
CI COM  
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS,  
BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB,  
CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB,  
DDFU, DETHERM\*, DIOGENES, DIPPR\*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2,  
ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB,  
IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM\*,  
PHARMASEARCH, PIRA, PROMT, RTECS\*, SPECINFO, TOXCENTER, TULSA, ULIDAT,  
USAN, USPAT2, USPATFULL, VETU, VTB  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)

H<sub>3</sub>C-CH<sub>2</sub>-OH

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

152448 REFERENCES IN FILE CA (1947 TO DATE)  
1131 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
152593 REFERENCES IN FILE CAPLUS (1947 TO DATE)  
11 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 139:77924  
REFERENCE 2: 139:77838  
REFERENCE 3: 139:77078  
REFERENCE 4: 139:77012  
REFERENCE 5: 139:76762



REFERENCE 6: 139:76746

REFERENCE 7: 139:76600

REFERENCE 8: 139:76182

REFERENCE 9: 139:76167

REFERENCE 10: 139:75681

L70 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2003 ACS on STN

RN 54-11-5 REGISTRY

CN Pyridine, 3-[(2S)-1-methyl-2-pyrrolidinyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Nicotine (8CI)

CN Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-

OTHER NAMES:

CN (-)-.beta.-Pyridyl-.alpha.-N-methylpyrrolidine

CN (-)-3-(1-Methyl-2-pyrrolidyl)pyridine

CN (-)-Nicotine

CN (S)-(-)-Nicotine

CN (S)-3-(1-Methyl-2-pyrrolidinyl)pyridine

CN (S)-Nicotine

CN Flux Maag

CN Habitrol

CN l-Nicotine

CN L-Nicotine

CN Nicabate

CN Nicoderm

CN Nicolan

CN Niconil

CN Nicopatch

CN Nicorette

CN Nicotell TTS

CN Nicotin

CN Nicotinell

CN Tabazur

CN XL All Insecticide

FS STEREOSEARCH

DR 13890-81-8, 13890-82-9, 6912-85-2, 551-13-3, 16760-37-5

MF C10 H14 N2

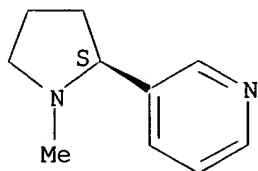
CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM\*, DIOGENES, DRUGNL, DRUGU, DRUGUPDATES, EMBASE, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM\*, PHAR, PHARMASEARCH, PIRA, PROMT, RTECS\*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU  
(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry. Rotation (-).



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

13931 REFERENCES IN FILE CA (1947 TO DATE)  
240 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
13951 REFERENCES IN FILE CAPLUS (1947 TO DATE)  
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 139:74088  
REFERENCE 2: 139:74029  
REFERENCE 3: 139:73918  
REFERENCE 4: 139:68727  
REFERENCE 5: 139:67869  
REFERENCE 6: 139:66322  
REFERENCE 7: 139:66190  
REFERENCE 8: 139:64745  
REFERENCE 9: 139:64744  
REFERENCE 10: 139:64743

=> d his 160-

(FILE 'REGISTRY' ENTERED AT 09:55:02 ON 28 JUL 2003)

FILE 'HCAPLUS' ENTERED AT 09:55:37 ON 28 JUL 2003

FILE 'REGISTRY' ENTERED AT 09:56:16 ON 28 JUL 2003

L60 1 S L2 AND CABER?  
L61 2 S 81409-90-7/CRN

FILE 'HCAPLUS' ENTERED AT 09:57:56 ON 28 JUL 2003

L62 207 S L60 OR L61  
L63 245 S CABERGOLIN? OR CABASER# OR DOSTINEX OR GALASTOP# OR SOGILEN#  
L64 257 S L62, L63  
L65 3 S L64 AND ADDICT?  
L66 7 S L64 AND L13-L21  
L67 6 S L64 AND L24  
L68 12 S L65-L67  
SEL DN AN 4 6 8  
L69 3 S E1-E9 AND L68  
SEL HIT RN

FILE 'REGISTRY' ENTERED AT 10:01:58 ON 28 JUL 2003

L70 3 S E10-E12

FILE 'REGISTRY' ENTERED AT 10:02:03 ON 28 JUL 2003

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 10:02:21 ON 28 JUL 2003  
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FILE COVERS 1907 - 28 Jul 2003 VOL 139 ISS 5  
FILE LAST UPDATED: 27 Jul 2003 (20030727/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

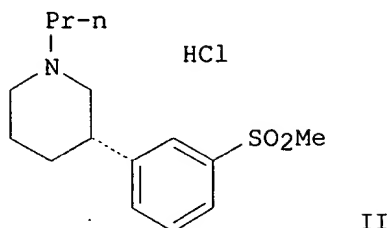
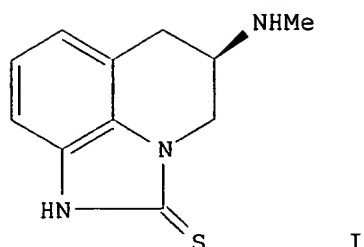
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L69 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2003 ACS on STN  
AN 2002:142501 HCAPLUS  
DN 136:205395  
TI Compounds for the treatment of **addictive** disorders  
IN Anderson, Richard W.; McBrinn, Sylvia S.; Robertson, David W.; Marshall, Robert C.  
PA Pharmacia & Upjohn Company, USA  
SO PCT Int. Appl., 39 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
IC ICM A61K031-00  
CC 63-6 (Pharmaceuticals)  
Section cross-reference(s): 1

FAN.CNT 1

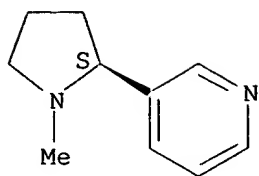
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002013807	A2	20020221	WO 2001-US25603	20010813
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	AU 2001083393	A5	20020225	AU 2001-83393	20010813
	US 2002049206	A1	20020425	US 2001-929666	20010814
	US 2003078273	A1	20030424	US 2002-295331	20021115
	NO 2003000717	A	20030214	NO 2003-717	20030214
PRAI	US 2000-225714P	P	20000816		
	US 2001-263610P	P	20010123		
	WO 2001-US25603	W	20010813		
	US 2001-929666	A3	20010814		
OS	MARPAT 136:205395				
GI					

*mine*



- AB The treatment of **addictive** disorders, psychoactive substance use disorders, intoxication disorders, inhalation disorders, alc. **addiction**, tobacco **addiction**, and nicotine **addiction** using a heterocyclic amine, a phenylazacycloalkane, a **cabergoline**, or an arom. bicyclic amine active agent, or a pharmaceutically acceptable deriv. or salt of any said active agent is described. Example compds. are I and II.
- ST **addiction** disorder treatment; heterocyclic amine **addiction** disorder treatment; phenyl azacycloalkane **addiction** disorder treatment; **cabergoline** **addiction** disorder treatment
- IT **Drug dependence**  
**Tobacco smoke**  
 (compds. for the treatment of **addictive** disorders)
- IT Amines, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (heterocyclic; compds. for the treatment of **addictive** disorders)
- IT **54-11-5**, Nicotine **64-17-5**, Ethanol, biological studies  
 RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
 (compds. for the treatment of **addictive** disorders)
- IT **81409-90-7**, **Cabergoline** 156907-84-5 170858-36-3  
 170858-41-0 173590-06-2 179386-43-7 282522-93-4 282522-94-5  
 369595-93-7 400716-28-1 400716-30-5 400716-32-7  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (compds. for the treatment of **addictive** disorders)
- IT **54-11-5**, Nicotine **64-17-5**, Ethanol, biological studies  
 RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
 (compds. for the treatment of **addictive** disorders)
- RN **54-11-5** HCAPLUS
- CN Pyridine, 3-[(2S)-1-methyl-2-pyrrolidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

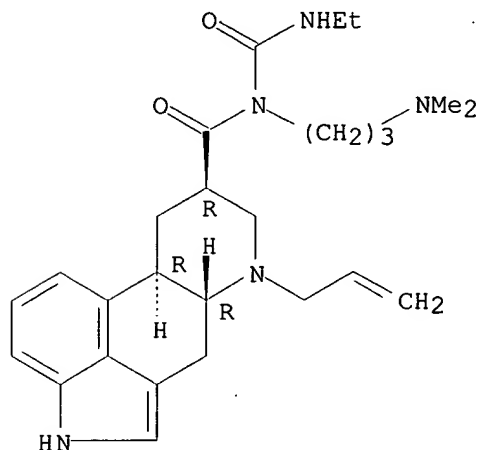


RN 64-17-5 HCAPLUS  
CN Ethanol (9CI) (CA INDEX NAME)

H<sub>3</sub>C-CH<sub>2</sub>-OH

IT **81409-90-7, Cabergoline**  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(comps. for the treatment of **addictive** disorders)  
RN 81409-90-7 HCAPLUS  
CN Ergoline-8-carboxamide, N-[3-(dimethylamino)propyl]-N-  
[(ethylamino)carbonyl]-6-(2-propenyl)-, (8.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L69 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2003 ACS on STN  
AN **2001:434864** HCAPLUS  
DN **135:29157**  
TI Tetrahydrobenzothiazole derivatives for the treatment of **addiction**  
disorders  
IN Berger, Stephen Paul  
PA University of Cincinnati, USA  
SO PCT Int. Appl., 41 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
IC ICM A61K031-428  
ICS A61K031-437; A61K031-4045  
CC 1-11 (Pharmacology)  
Section cross-reference(s): 4  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001041763	A1	20010614	WO 2000-US33444	20001208

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
 CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,  
 HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,  
 LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,  
 SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,  
 YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-170104P P 19991210

OS MARPAT 135:29157

AB Methods for the treatment of **addiction** disorders involve administering a tetrahydrobenzothiazole deriv., e.g. pramipexole. The invention comprises methods for the treatment or prevention of **addiction** disorders using tetrahydrobenzothiazole derivs., pharmaceutical compns. contg. one or more of tetrahydrobenzothiazole derivs., or pharmaceutical compns. contg. one or more of tetrahydrobenzothiazole derivs. in addn. to a safe and effective amt. of one or more addnl. agents to treat related symptoms and conditions. The invention relates to new uses of tetrahydrobenzothiazoles, the enantiomers and acid addn. salts thereof, particularly the pharmaceutically acceptable acid addn. salts thereof with inorg. or org. acids. The invention also relates to the use of ropinirole and carbergoline for the treatment of **addiction** disorders.

ST tetrahydrobenzothiazole deriv **addiction** disorder treatment;  
 pramipexole **addiction** disorder treatment; ropinirole  
 carbergoline **addiction** disorder treatment

IT **Drugs of abuse**

(**abuse of**; tetrahydrobenzothiazole derivs. for  
**addiction** disorder treatment)

IT Adrenal cortex

(adrenocortical suppressants; tetrahydrobenzothiazole derivs. for  
**addiction** disorder treatment, and use with other agents)

IT Thyroid hormones

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(and thyroid inhibitors; tetrahydrobenzothiazole derivs. for  
**addiction** disorder treatment, and use with other agents)

IT Androgens

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antiandrogens; tetrahydrobenzothiazole derivs. for **addiction**  
 disorder treatment, and use with other agents)

IT Nausea

(antinauseants; tetrahydrobenzothiazole derivs. for **addiction**  
 disorder treatment, and use with other agents)

IT Anti-ischemic agents

(cerebral ischemia; tetrahydrobenzothiazole derivs. for  
**addiction** disorder treatment, and use with other agents)

IT Behavior

(disorder, **addictions**; tetrahydrobenzothiazole derivs. for  
**addiction** disorder treatment)

IT Appetite

(disorder; tetrahydrobenzothiazole derivs. for **addiction**  
 disorder treatment)

IT Appetite

(hyperphagia; tetrahydrobenzothiazole derivs. for **addiction**  
 disorder treatment)

IT Emotion

(mood regulators; tetrahydrobenzothiazole derivs. for **addiction**  
 disorder treatment, and use with other agents)

- IT Cytoprotective agents
  - (neuroprotectants; tetrahydrobenzothiazole derivs. for **addiction** disorder treatment, and use with other agents)
- IT Agranulocytosis
  - (neutropenia, antineutropenics; tetrahydrobenzothiazole derivs. for **addiction** disorder treatment, and use with other agents)
- IT Mental disorder
  - (obsession, anti-obsessional agents; tetrahydrobenzothiazole derivs. for **addiction** disorder treatment, and use with other agents)
- IT Mental activity
  - (performance, enhancers; tetrahydrobenzothiazole derivs. for **addiction** disorder treatment, and use with other agents)
- IT Mental disorder
  - (personality disorder; tetrahydrobenzothiazole derivs. for **addiction** disorder treatment)
- IT Nervous system agents
  - (relaxants; tetrahydrobenzothiazole derivs. for **addiction** disorder treatment, and use with other agents)
- IT Biological transport
  - (serotonin reuptake inhibitors; tetrahydrobenzothiazole derivs. for **addiction** disorder treatment, and use with other agents)
- IT 5-HT antagonists
- Adrenoceptor agonists
- Alcoholism**
- Analgesics
- Anti-inflammatory agents
- Antidepressants
- Antidiabetic agents
- Antihypertensives
- Antiobesity agents
- Antiparkinsonian agents
- Antipsychotics
- Anxiolytics
- Appetite depressants
- Cardiotonics
- Cardiovascular agents
- Choleretics
- Cholinergic agonists
- Cognition enhancers
- Drug dependence**
- Hypnotics and Sedatives
- Nervous system stimulants
- Opioid antagonists
- Psychostimulants
- Psychotropics
- Sexual behavior
- Tranquilizers
- Vasoconstrictors
- Vasodilators
  - (tetrahydrobenzothiazole derivs. for **addiction** disorder treatment, and use with other agents)
- IT **Opioids**
  - RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
  - (tetrahydrobenzothiazole derivs. for **addiction** disorder treatment, and use with other agents)
- IT Amino acids, biological studies
- Corticosteroids, biological studies
- Hormones, animal, biological studies
- RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

- (tetrahydrobenzothiazole derivs. for **addiction** disorder treatment, and use with other agents)
- IT Adrenoceptors  
RL: BSU (Biological study, unclassified); BIOL (Biological study) (.alpha.-, .alpha.-adrenergic agents; tetrahydrobenzothiazole derivs. for **addiction** disorder treatment, and use with other agents)
- IT 64-17-5, Ethanol, biological studies  
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (alc. abuse; tetrahydrobenzothiazole derivs. for **addiction** disorder treatment, and use with other agents)
- IT 52-39-1, Aldosterone  
RL: BSU (Biological study, unclassified); BIOL (Biological study) (antagonists; tetrahydrobenzothiazole derivs. for **addiction** disorder treatment, and use with other agents)
- IT 9001-08-5, Cholinesterase  
RL: BSU (Biological study, unclassified); BIOL (Biological study) (deactivators; tetrahydrobenzothiazole derivs. for **addiction** disorder treatment, and use with other agents)
- IT 50-67-9, Serotonin, biological studies 9001-03-0, Carbonic anhydrase  
RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitors; tetrahydrobenzothiazole derivs. for **addiction** disorder treatment, and use with other agents)
- IT 50-99-7, D-Glucose, biological studies  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (regulators; tetrahydrobenzothiazole derivs. for **addiction** disorder treatment, and use with other agents)
- IT 2933-29-1D, derivs.  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (tetrahydrobenzothiazole derivs. for **addiction** disorder treatment)
- IT 50-36-2, Cocaine  
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (tetrahydrobenzothiazole derivs. for **addiction** disorder treatment, and use with other agents)
- IT 54-11-5, Nicotine  
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (tetrahydrobenzothiazole derivs. for **addiction** disorder treatment, and use with other agents)
- IT 99-66-1, Valproic acid 7439-93-2, Lithium, biological studies 12794-10-4D, Benzodiazepine, derivs. 16590-41-3, Naltrexone 34911-55-2, Bupropion 76584-70-8, Divalproex sodium 77337-76-9, Acamprosate 81409-90-7, Cabergoline 81409-90-7D, Cabergoline, derivs. 91374-21-9, Ropinirole 91374-21-9D, Ropinirole, derivs. 96829-58-2, Orlistat 106650-56-0, Sibutramine  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (tetrahydrobenzothiazole derivs. for **addiction** disorder treatment, and use with other agents)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Caine; Neuro Report, STN Accession No 1997:168007 1997, V8/910, P2373

IT 64-17-5, Ethanol, biological studies

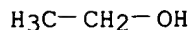


RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(alc. abuse; tetrahydrobenzothiazole derivs. for **addiction** disorder treatment, and use with other agents)

RN 64-17-5 HCAPLUS

CN Ethanol (9CI) (CA INDEX NAME)



IT 54-11-5, Nicotine

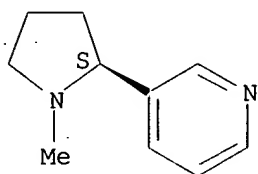
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(tetrahydrobenzothiazole derivs. for **addiction** disorder treatment, and use with other agents)

RN 54-11-5 HCAPLUS

CN Pyridine, 3-[(2S)-1-methyl-2-pyrrolidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IT 81409-90-7, Cabergoline 81409-90-7D, Cabergoline, derivs.

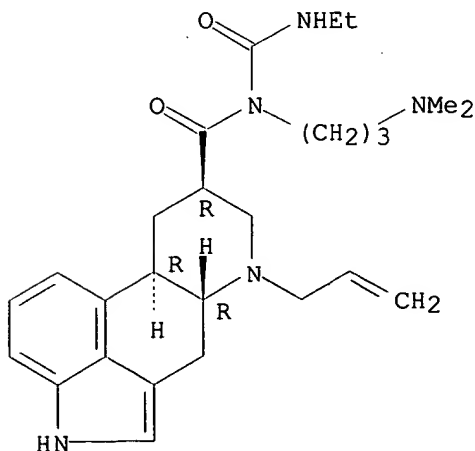
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(tetrahydrobenzothiazole derivs. for **addiction** disorder treatment, and use with other agents)

RN 81409-90-7 HCAPLUS

CN Ergoline-8-carboxamide, N-[3-(dimethylamino)propyl]-N-[(ethylamino)carbonyl]-6-(2-propenyl)-, (8.beta.)- (9CI) (CA INDEX NAME)

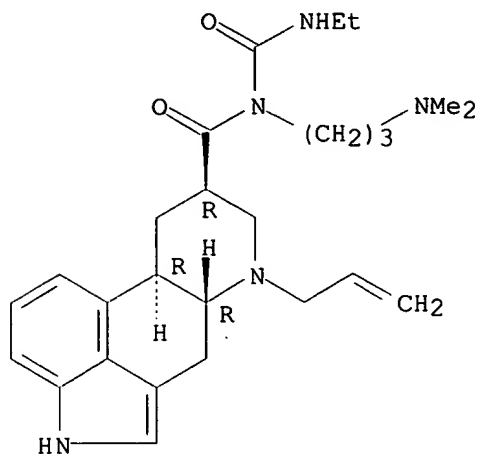
Absolute stereochemistry.



RN 81409-90-7 HCAPLUS

CN Ergoline-8-carboxamide, N-[3-(dimethylamino)propyl]-N-[(ethylamino)carbonyl]-6-(2-propenyl)-, (8.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L69 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 2000:666601 HCAPLUS  
 DN 133:256811  
 TI Pharmaceutical compositions containing dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions  
 IN Garvey, David S.  
 PA Nitromed, Inc., USA  
 SO PCT Int. Appl., 48 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A61K031-44  
 ICS A61K031-495; A61K031-21; A61K031-195; A61K031-16; A61K031-135; A61K031-04  
 CC 63-6 (Pharmaceuticals)  
 Section cross-reference(s): 1  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000054773	A1	20000921	WO 2000-US3709	20000310
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRAI US 1999-123920P P 19990312

OS MARPAT 133:256811

AB The present invention is directed to novel compns. comprising at least one dopamine agonist in combination with at least one nitric oxide donor (i.e. compds. that donate, transfer or release nitric oxide, elevate endogenous levels of endothelium-derived relaxing factor, stimulate endogenous synthesis of nitric oxide or are substrates for nitric oxide synthase). The novel compns. may optionally comprise at least one therapeutic agent, such as, a vasoactive agent, an antiemetic agent, and mixts. thereof. The

dopamine agonist is preferably apomorphine. The present invention is also directed to methods for treating and/or preventing sexual dysfunctions and/or enhancing sexual responses in patients. In other embodiments, the present invention is directed to methods treating or preventing neurodegenerative diseases, mitochondrial diseases, spinal cord injury, central or psychostimulant **addiction**, senile dementia, circulatory disorders, cardiovascular disorders, hyperprolactinemia or myopia. The compds. and/or compns. of the present invention can also be provided in the form of a pharmaceutical kit (no data).

- ST pharmaceutical dopamine agonist sexual dysfunction; nitric oxide donor pharmaceutical sexual dysfunction
- IT Thiols (organic), biological studies  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(S-nitroso; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT Endothelin receptors  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(antagonists; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT Drug delivery systems  
(buccal; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT Ion channel blockers  
(calcium; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT Drug delivery systems  
(capsules, sustained-release; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT Drug delivery systems  
(capsules; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT Contraceptives  
(condoms; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT Nervous system  
(degeneration; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT Cardiovascular system  
(disease; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT Mitochondria  
(diseases; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT Circulation  
Sexual behavior  
(disorder; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT Drug delivery systems  
(emulsions; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing

sexual dysfunctions)

IT Alkaloids, biological studies  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(ergot; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)

IT Drug delivery systems  
(foams; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)

IT Drug delivery systems  
(gels; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)

IT Drug delivery systems  
(inhalants; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)

IT Drug delivery systems  
(injections; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)

IT Drug delivery systems  
(liposomes; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)

IT Drug delivery systems  
(lotions; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)

IT Vision  
(myopia; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)

IT Drug delivery systems  
(ointments, creams; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)

IT Drug delivery systems  
(ointments; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)

IT Drug delivery systems  
(oral; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)

IT 5-HT antagonists  
Antiemetics  
Antihistamines  
Cholinergic antagonists  
Dopamine agonists  
Dopamine antagonists  
Opioid antagonists  
Psychostimulants  
Vasoconstrictors  
(pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)

IT Peptides, biological studies  
Prostaglandins  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

## (Uses)

- (pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT Ion channel openers  
(potassium; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT Mental disorder  
(senile psychosis; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT Drug delivery systems  
(solids; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT Drug delivery systems  
(sprays; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT Drug delivery systems  
(sublingual; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT Drug delivery systems  
(tablets; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT Drug delivery systems  
(tapes, sustained-release; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT Drug delivery systems  
(topical; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT Drug delivery systems  
(transdermal; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT Adrenoceptor antagonists  
(.alpha.-; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT Adrenoceptor antagonists  
(.beta.-; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT 9002-62-4, Prolactin, biological studies  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(hyperprolactinemia; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT 9040-59-9, 3',5' Cyclic nucleotide phosphodiesterase  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(inhibitors; pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)
- IT 10102-43-9, Nitric oxide, biological studies 90880-94-7, Endothelium-derived relaxing factor  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FMU (Formation, unclassified); THU (Therapeutic use); BIOL (Biological study); FORM (Formation, nonpreparative); USES (Uses)

(pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)

IT 50-60-2, Phentolamine 50-67-9, Serotonine, biological studies 51-61-6, Dopamine, biological studies 51-64-9 52-86-8, Haloperidol 54-32-0, Moxisylyte 56-85-9, Glutamine, biological studies 56-87-1, Lysine, biological studies 58-00-4, Apomorphine. 58-61-7, Adenosine, biological studies 58-74-2, Papaverine 59-92-7, biological studies 65-28-1, Phentolamine mesylate 70-26-8, Ornithine 73-05-2, Phentolamine hydrochloride 74-79-3, L Arginine, biological studies 74-79-3D, L-Arginine, nitrosated and nitrosylated, biological studies 113-69-9, Benzquinamide hydrochloride 138-56-7, Trimethobenzamide 146-48-5, Yohimbine 156-86-5, L Homoarginine 314-19-2, Apomorphine hydrochloride 322-35-0, Benserazide 364-62-5, Metoclopramide 372-75-8, Citrulline 458-24-2, Fenfluramine 511-12-6, Dihydroergotamine 519-10-8, Lysergin 768-94-5, Amantadine 1199-85-5, p-Chloromethylamphetamine 1744-22-5, Riluzole 3254-89-5, Diphenidol hydrochloride 3605-01-4, Piribedil 4774-53-2, Botiacrine 5786-21-0, Clozapine 7424-00-2, p-Chlorophenylalanine 14008-44-7, Metopimazine 15676-16-1, Sulpiride 16378-21-5, Piroheptine 17479-19-5, Dihydroergocristine 17692-51-2, Metergoline 18016-80-3, Lisuride 18426-20-5, N-n-Propyl norapomorphine 19216-56-9, Prazosin 19794-93-5, Trazodone 22232-71-9, Mazindol 25447-66-9, Dihydroergocryptine 25614-03-3, Bromocriptine 32359-34-5, Medifoxamine 34911-55-2, Bupropion 36945-03-6, Lergotrile 37221-79-7, Vasoactive intestinal peptide 37686-84-3, Terguride 37762-06-4, Zaprinast 42599-90-6D, nitrosated and nitrosylated 56577-02-7, S-Nitroso-n-acetylcysteine 57564-91-7, S-Nitroso glutathione 57574-09-1, Amineptine 57808-66-9, Domperidone 57935-49-6, Tiomergine 63590-64-7, Terazosin 64795-35-3, Mesulergine 66104-22-1, Pergolide 66195-31-1, Ibopamine 66759-48-6, Desocriptine 67227-56-9, Fenoldopam 67287-49-4, Skf 38393 71636-61-8, Skf 81297 71800-28-7, Propylbutyldopamine 74191-85-8, Doxazosin 74639-40-0, Docarpamine 79032-48-7, S-Nitroso-N-acetylpenicillamine 80373-22-4, Quinpirole 81409-90-7, **Cabergoline** 84226-12-0, Eticlopride 86197-47-9, Dopexamine 87056-78-8, Quinagolide 88058-88-2, Naxagolide 89419-40-9, Mosapramine 91374-21-9, Ropinirole 98323-83-2, Carmoxirole 101626-70-4, Talipexole 104632-26-0, Pramipexole 112885-41-3, Mosapride 122130-63-6, S-Nitroso captopril 125978-95-2, Nitric oxide synthase 139427-42-2, S-Nitrosohomocysteine 139755-83-2, Sildenafil 171596-29-5, Ic 351

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Cooke; US 5891459 A 1999 HCAPLUS
- (2) El-Rashid, Y; US 5770606 A 1998 HCAPLUS
- (3) Schoenleber; US 4963568 A 1990 HCAPLUS
- (4) The United States Of America; WO 9632118 A 1996 HCAPLUS

IT 81409-90-7, **Cabergoline**

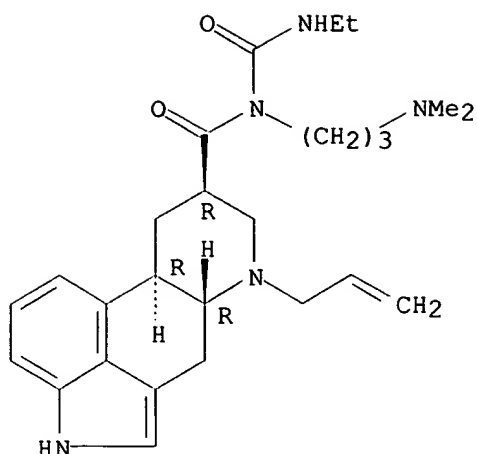
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceutical compns. contg. dopamine agonists in combination with nitric oxide donors for treating and/or preventing sexual dysfunctions)

RN 81409-90-7 HCAPLUS

CN Ergoline-8-carboxamide, N-[3-(dimethylamino)propyl]-N-[(ethylamino)carbonyl]-6-(2-propenyl)-, (8.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> fil uspatall

FILE 'USPATFULL' ENTERED AT 10:07:45 ON 28 JUL 2003

CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 10:07:45 ON 28 JUL 2003

CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

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L85 ANSWER 1 OF 8 USPATFULL on STN

AN 2003:113532 USPATFULL

TI Compounds for the treatment of **addictive** disorders

IN Anderson, Richard W., Annandale, NJ, UNITED STATES

McBrinn, Sylvia S., Stockton, NJ, UNITED STATES

Robertson, David W., Galesburg, MI, UNITED STATES

Marshall, Robert C., Mattawan, MI, UNITED STATES

PI US 2003078273 A1 20030424

AI US 2002-295331 A1 20021115 (10)

RLI Division of Ser. No. US 2001-929666, filed on 14 Aug 2001, PENDING

PRAI US 2001-263610P 20010123 (60)

US 2000-225714P 20000816 (60) <--

DT Utility

FS APPLICATION

LREP MARSHALL, GERSTEIN & BORUN, 6300 SEARS TOWER, 233 SOUTH WACKER, CHICAGO, IL, 60606-6357

CLMN Number of Claims: 25

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 831

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The treatment of **addictive** disorders, psychoactive substance use disorders, intoxication disorders, inhalation disorders, alcohol **addiction**, tobacco **addiction**, and nicotine **addiction** using a heterocyclic amine, a phenylazacycloalkane, a cabergoline, or an aromatic bicyclic amine active agent, or a pharmaceutically acceptable derivative or salt of any said active agent is described herein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

TI Compounds for the treatment of **addictive** disorders

PRAI US 2000-225714P 20000816 (60) <--

AB The treatment of **addictive** disorders, psychoactive substance

use disorders, intoxication disorders, inhalation disorders, alcohol **addiction**, tobacco **addiction**, and nicotine **addiction** using a heterocyclic amine, a phenylazacycloalkane, a cabergoline, or an aromatic bicyclic amine active agent, or a pharmaceutically acceptable derivative. . . .

SUMM . . . . improving symptoms of, several nervous system disorders. More particularly, the invention relates to treatment and improvement of symptoms related to **addictive** disorders, psychoactive substance use disorders, nicotine **addiction**, and tobacco **addiction**.

SUMM . . . . whether these compounds having useful properties for treating neuromuscular disorders can be used for treating other nervous system disorders, particularly **addictive** diseases. More particularly, the use of these compounds for nervous systems disorders, for example, **addictive** disorders, psychoactive substance use disorders, nicotine **addiction**, or tobacco **addiction** resulting in smoking cessation, have been considered.

SUMM . . . . compounds, aromatic bicyclic amine compounds have also been investigated for potential activity useful for treating nervous system disorders, such as **addictive** diseases. The aromatic bicyclic amine compounds have been reported to demonstrate activity useful for treatment of some central nervous system. . . .

SUMM [0010] Methods for using the described compounds for treating **addictive**-type nervous disorders has not been reported. Methods and dosages for using heterocyclic amine compounds, phenylazacycloalkane compounds, cabergoline, aromatic bicyclic amine compounds and the derivatives of these classes of compounds for treating specific **addictive** disorders are described herein.

SUMM [0011] The invention provides a method for the treatment of certain **addictive** disorders, for example, psychoactive substance use disorders, nicotine **addiction** or tobacco **addiction** (with a result of smoking cessation or a decrease in smoking). The method includes the step of administering a therapeutically. . . . amine compound, or a pharmaceutically acceptable salt or derivative thereof, to a patient suffering from or susceptible to such an **addiction** or disorder.

DETD . . . . can be used to treat and ameliorate nervous system disorders. The disorders typically can include, but are not limited to, **addictive** disorders, psychoactive substance use disorders, nicotine addition, tobacco **addiction**, and other diseases or disorders related to affliction of the nervous system, and more particularly, the central nervous system.

DETD . . . . classes of compounds can be used for treating or suppressing the symptoms of conditions related to nervous system affliction, particularly **addictive** disorders. Examples of at least the following classes of compounds are provided for the method of the invention.

DETD [0122] For treating the **addictive** disorders described herein the drug may also be provided in chewable format, such as a chewing gum. The amount of. . . .

DETD [0127] **Addictive** disorders and psychoactive substance use disorders, such as intoxication disorders, inhalation disorders, alcohol **addiction**, tobacco **addiction** and/or nicotine **addiction** can be treated according to the invention. Tobacco and nicotine **addiction** would be treated with the goal of achieving either smoking cessation or at least a reduction in the intake of tobacco and/or nicotine. General descriptions of **addictive** disorders, including disorders related to intoxication, inhalants, and tobacco **addiction** or nicotine **addiction** can be found in many standard sources. The **addictions** and behaviors that can be treated by the invention generally are further described in, for example, The American Psychiatric Press. . . .

DETD . . . . other psychoactive substance use disorders such as, for



example, disorders related to intoxication or inhalants, more particularly tobacco or nicotine **addiction**. The effect of the invention on tobacco **addiction** more particularly involves the administration of the active agent in a manner and form that reduces the symptoms of the. . .

CLM What is claimed is:

1. A method of treating or suppressing the symptoms of at least one disorder selected from **addictive** disorders, psychoactive substance use disorders, intoxication disorders, inhalation disorders, alcohol **addiction**, tobacco **addiction**, and nicotine **addiction**, said method comprising the step of administering a therapeutically effective, nontoxic amount of an active agent selected from the group. . .

. . . method of claim 1 wherein the active agent is used to treat or enhance the treatment of tobacco and/or nicotine **addiction**.

IT **Drug dependence**

IT **Tobacco smoke**

(compds. for the treatment of addictive disorders)

IT 54-11-5, Nicotine 64-17-5, Ethanol, biological studies

(compds. for the treatment of addictive disorders)

IT 81409-90-7, Cabergoline 156907-84-5 170858-36-3 170858-41-0

173590-06-2 179386-43-7 282522-93-4

282522-94-5 369595-93-7 400716-28-1 400716-30-5

400716-32-7

(compds. for the treatment of addictive disorders)

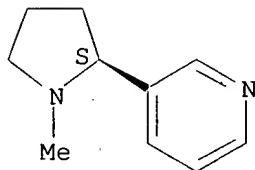
IT 54-11-5, Nicotine 64-17-5, Ethanol, biological studies

(compds. for the treatment of addictive disorders)

RN 54-11-5 USPATFULL

CN Pyridine, 3-[(2S)-1-methyl-2-pyrrolidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 64-17-5 USPATFULL

CN Ethanol (9CI) (CA INDEX NAME)

H<sub>3</sub>C-CH<sub>2</sub>-OH

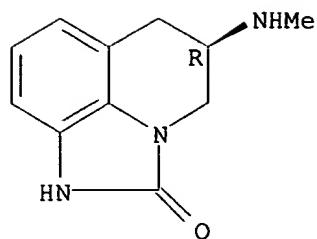
IT 179386-43-7 282522-93-4 282522-94-5

(compds. for the treatment of addictive disorders)

RN 179386-43-7 USPATFULL

CN 4H-Imidazo[4,5,1-ij]quinolin-2(1H)-one, 5,6-dihydro-5-(methylamino)-, (5R)- (9CI) (CA INDEX NAME)

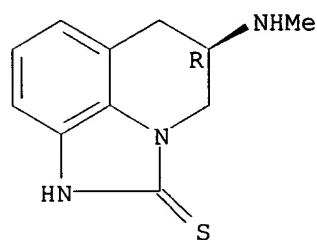
Absolute stereochemistry. Rotation (-).



RN 282522-93-4 USPTFULL

CN 4H-Imidazo[4,5,1-ij]quinoline-2(1H)-thione, 5,6-dihydro-5-(methylamino)-, (5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 282522-94-5 USPTFULL

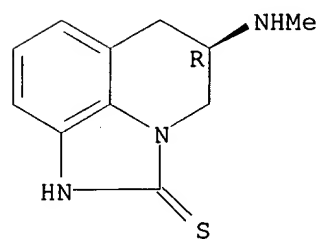
CN 4H-Imidazo[4,5,1-ij]quinoline-2(1H)-thione, 5,6-dihydro-5-(methylamino)-, (5R)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 282522-93-4

CMF C11 H13 N3 S

Absolute stereochemistry.



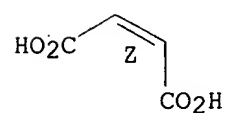
CM 2

CRN 110-16-7

CMF C4 H4 O4

CDES 2:Z

Double bond geometry as shown.



L85 ANSWER 2 OF 8 USPTFLL on STN  
 AN 2002:259436 USPTFLL  
 TI Compounds for treating fibromyalgia and chronic fatigue syndrome  
 IN McCall, Robert B., Kalamazoo, MI, UNITED STATES  
 Marshall, Robert Clyde, Mattawan, MI, UNITED STATES  
 Robertson, David W., Galesburg, MI, UNITED STATES  
 Ashley, Thomas M., Portage, MI, UNITED STATES  
 PI US 2002143010 A1 20021003  
 US 6555548 B2 20030429  
 AI US 2002-159913 A1 20020530 (10)  
 RLI Division of Ser. No. US 2001-836660, filed on 17 Apr 2001, PENDING  
 PRAI US 2000-198959P 20000421 (60) <--  
 US 2000-200569P 20000428 (60) <--  
 DT Utility  
 FS APPLICATION  
 LREP Pharmacia & Upjohn Company, Global Intellectual Property, 301 Henrietta  
 Street, Kalamazoo, MI, 49001  
 CLMN Number of Claims: 30  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 763

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides for methods for the treatment of  
 fibromyalgia syndrome or chronic fatigue syndrome by the administration  
 of heterocyclic amine-type compounds, substituted phenylazacycloalkane-  
 type compounds, or cabergoline-type compounds, or a salt of any said  
 compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

PRAI US 2000-198959P 20000421 (60) <--  
 PRAI US 2000-200569P 20000428 (60) <--  
 SUMM . . . used medications produce side effects ranging from mild side  
 effects, e.g., drowsiness, dizziness, and nausea to serious side  
 effects, e.g., addiction and liver damage

IT **282522-93-4P**, (5R)-5-(Methylamino)-5,6-dihydro-4H-imidazo[4,5,1-  
 ij]quinoline-2(1H)-thione **282522-94-5P**  
 (prepn. of heterocyclic amines for treating fibromyalgia and chronic  
 fatigue syndrome)

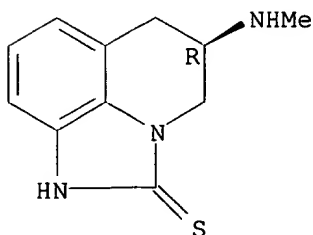
IT 81409-90-7, Cabergoline 156907-84-5 173590-06-2 **179386-43-7**  
**179386-44-8** 369595-93-7  
 (prepn. of heterocyclic amines for treating fibromyalgia and chronic  
 fatigue syndrome)

IT **282522-93-4P**, (5R)-5-(Methylamino)-5,6-dihydro-4H-imidazo[4,5,1-  
 ij]quinoline-2(1H)-thione **282522-94-5P**  
 (prepn. of heterocyclic amines for treating fibromyalgia and chronic  
 fatigue syndrome)

RN 282522-93-4 USPTFLL

CN 4H-Imidazo[4,5,1-ij]quinoline-2(1H)-thione, 5,6-dihydro-5-(methylamino)-,  
 (5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

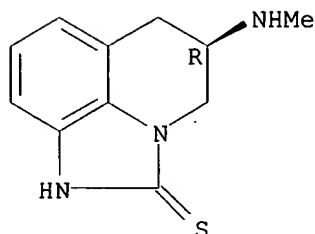


RN 282522-94-5 USPATFULL  
 CN 4H-Imidazo[4,5,1-ij]quinoline-2(1H)-thione, 5,6-dihydro-5-(methylamino)-,  
 (5R)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 282522-93-4  
 CMF C11 H13 N3 S

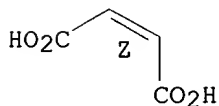
Absolute stereochemistry.



CM 2

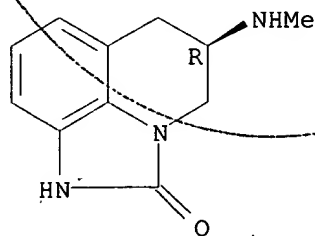
CRN 110-16-7  
 CMF C4 H4 O4  
 CDES 2:Z

Double bond geometry as shown.



IT 179386-43-7 179386-44-8  
 (prepn. of heterocyclic amines for treating fibromyalgia and chronic  
 fatigue syndrome)  
 RN 179386-43-7 USPATFULL  
 CN 4H-Imidazo[4,5,1-ij]quinolin-2(1H)-one, 5,6-dihydro-5-(methylamino)-,  
 (5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

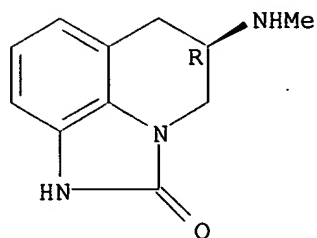


RN 179386-44-8 USPATFULL  
 CN 4H-Imidazo[4,5,1-ij]quinolin-2(1H)-one, 5,6-dihydro-5-(methylamino)-,  
 (5R)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 179386-43-7  
 CMF C11 H13 N3 O

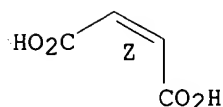
Absolute stereochemistry. Rotation (-).



CM 2

CRN 110-16-7  
CMF C4 H4 O4  
CDES 2:Z

Double bond geometry as shown.



L85 ANSWER 3 OF 8 USPATFULL on STN

AN 2002:99494 USPATFULL

TI Diphenyl ether compounds useful in therapy

IN Andrews, Mark David, Kent, UNITED KINGDOM

Hepworth, David, Kent, UNITED KINGDOM

Middleton, Donald Stuart, Kent, UNITED KINGDOM

Stobie, Alan, Kent, UNITED KINGDOM

PI US 2002052395 A1 20020502

US 6448293 B2 20020910

AI US 2001-810378 A1 20010316 (9)

PRAI GB 2000-7884 20000331

US 2000-197127P 20000414 (60)

<--

<--

DT Utility

FS APPLICATION

LREP Paul H. Ginsburg, Pfizer Inc., 20th Floor, 235 East 42nd Street, New York, NY, 10017-5755

CLMN Number of Claims: 29

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 4655

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A compound of general formula (I), or pharmaceutically acceptable salts, solvates or polymorphs thereof; wherein; R.sup.1 and R.sup.2, which may be the same or different, are hydrogen, C.sub.1-C.sub.6alkyl, (CH.sub.2)m(C.sub.3-C.sub.6cycloalkyl) wherein m = 0, 1, 2 or 3, or R.sup.1 and R.sup.2 together with the nitrogen to which they are attached form an azetidine ring; each R.sup.3 is independently CF.sub.3, OCF.sub.3, C.sub.1-4alkylthio or C.sub.1-C.sub.4alkoxy; n is 1, 2 or 3; and R.sup.4 and R.sup.5, which may be the same or different, are: A-X, wherein A = --CH=CH-- or --(CH.sub.2)p-- where p is 0, 1 or 2; X is hydrogen, F, Cl, Br, I, CONR.sup.6R.sup.7, SO.sub.2NR.sup.6R.sup.7, SO.sub.2NHC(=O)R.sup.6, OH, C.sub.1-4alkoxy, NR.sup.8SO.sub.2R.sup.9, NO.sub.2, NR.sup.6R.sup.11, CN, CO.sub.2R.sup.10, CHO, SR.sup.10, S(O)R.sup.9 or SO.sub.2R.sup.10 R.sup.6, R.sup.7, R and R.sup.10 which

may be the same or different, are hydrogen or C.sub.1-6alkyl optionally substituted independently by one or more R.sup.12; R.sup.9 is C.sub.1-6 alkyl optionally substituted independently by one or more R.sup.12; R.sup.11 is hydrogen, C.sub.1-6 alkyl optionally substituted independently by one or more R.sup.12, C(O)R.sup.6, CO.sub.2R.sup.9, C(O)NHR.sup.6 or SO.sub.2NR.sup.6R.sup.7; R.sup.12 is F, OH, CO.sub.2H, C.sub.3-6cycloalkyl, NH.sub.2, CONH.sub.2, C.sub.1-6alkoxy, C.sub.1-6alkoxycarbonyl or a 5- or 6-membered heterocyclic ring containing 1, 2 or 3 heteroatoms selected from N, S and O optionally substituted independently by one or more R.sup.13; or R.sup.6 and R.sup.7, together with the nitrogen to which they are attached, form a 4-, 5- or 6-membered heterocyclic ring optionally substituted independently by one or more R.sup.13; or a 5- or 6-membered heterocyclic ring containing 1, 2 or 3 heteroatoms selected from N, S and O, optionally substituted independently by one or more R.sup.13; wherein R.sup.13 is hydroxy, C.sub.1-C.sub.4alkoxy, F, C.sub.1-C.sub.6alkyl, haloalkyl, haloalkoxy, --NH.sub.2, --NH(C.sub.1-C.sub.6alkyl) or --N(C.sub.1-C.sub.6alkyl).sub.2; wherein when R.sup.1 and R.sup.2 are methyl, R.sup.4 and R.sup.5 are hydrogen and n is 1, R.sup.3 is not a --SMe group para to the ether linkage linking rings A and B. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

PRAI GB 2000-7884 20000331 <--  
 PRAI US 2000-197127P 20000414 (60) <--  
 SUMM . . . posttraumatic stress syndrome, avoidant personality disorder, premature ejaculation, eating disorders (e.g. anorexia nervosa and bulimia nervosa), obesity, chemical dependencies (e.g. **addictions** to alcohol, cocaine, heroin, phenobarbital, nicotine and benzodiazepines), cluster headache, migraine, pain, Alzheimers disease, obsessive-compulsive disorder, panic disorder, memory disorders.  
 SUMM [0139] Dopamine D2 agonists (e.g. Premipriaxal, Pharmacia Upjohn compound number **PNU95666**);  
 IT **Drugs of abuse**  
 (abuse of, treatment; prepn. of di-Ph ether compds. as serotonin re-uptake inhibitors)

L85 ANSWER 4 OF 8 USPATFULL on STN

AN 2002:92682 USPATFULL

TI Compounds for the treatment of **addictive** disorders

IN Anderson, Richard W., Annandale, NJ, UNITED STATES

McBrinn, Sylvia S., Stockton, NJ, UNITED STATES

Robertson, David W., Galesburg, MI, UNITED STATES

Marshall, Robert C., Mattawan, MI, UNITED STATES

PI US 2002049206 A1 20020425

AI US 2001-929666 A1 20010814 (9)

PRAI US 2001-263610P 20010123 (60)

US 2000-225714P 20000816 (60)

DT Utility

FS APPLICATION

LREP MARSHALL, O'TOOLE, GERSTEIN, MURRAY & BORUN, 6300 SEARS TOWER, 233 SOUTH WACKER DRIVE, CHICAGO, IL, 60606-6402

CLMN Number of Claims: 25

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 830

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The treatment of **addictive** disorders, psychoactive substance use disorders, intoxication disorders, inhalation disorders, alcohol **addiction**, tobacco **addiction**, and nicotine **addiction** using a heterocyclic amine, a phenylazacycloalkane, a cabergoline, or an aromatic bicyclic amine active agent, or a

pharmaceutically acceptable derivative or salt of any said active agent is described herein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

TI Compounds for the treatment of **addictive** disorders  
PRAI US 2000-225714P 20000816 (60) <--  
AB The treatment of **addictive** disorders, psychoactive substance use disorders, intoxication disorders, inhalation disorders, alcohol **addiction**, tobacco **addiction**, and nicotine **addiction** using a heterocyclic amine, a phenylazacycloalkane, a cabergoline, or an aromatic bicyclic amine active agent, or a pharmaceutically acceptable derivative. . . .  
SUMM . . . improving symptoms of, several nervous system disorders. More particularly, the invention relates to treatment and improvement of symptoms related to **addictive** disorders, psychoactive substance use disorders, nicotine **addiction**, and tobacco **addiction**.  
SUMM . . . whether these compounds having useful properties for treating neuromuscular disorders can be used for treating other nervous system disorders, particularly **addictive** diseases. More particularly, the use of these compounds for nervous systems disorders, for example, **addictive** disorders, psychoactive substance use disorders, nicotine **addiction**, or tobacco **addiction** resulting in smoking cessation, have been considered.  
SUMM . . . compounds, aromatic bicyclic amine compounds have also been investigated for potential activity useful for treating nervous system disorders, such as **addictive** diseases. The aromatic bicyclic amine compounds have been reported to demonstrate activity useful for treatment of some central nervous system. . . .  
SUMM [0010] Methods for using the described compounds for treating **addictive**-type nervous disorders has not been reported. Methods and dosages for using heterocyclic amine compounds, phenylazacycloalkane compounds, cabergoline, aromatic bicyclic amine compounds and the derivatives of these classes of compounds for treating specific **addictive** disorders are described herein.  
SUMM [0011] The invention provides a method for the treatment of certain **addictive** disorders, for example, psychoactive substance use disorders, nicotine **addiction** or tobacco **addiction** (with a result of smoking cessation or a decrease in smoking). The method includes the step of administering a therapeutically. . . . amine compound, or a pharmaceutically acceptable salt or derivative thereof, to a patient suffering from or susceptible to such an **addiction** or disorder.  
DETD . . . can be used to treat and ameliorate nervous system disorders. The disorders typically can include, but are not limited to, **addictive** disorders, psychoactive substance use disorders, nicotine addition, tobacco **addiction**, and other diseases or disorders related to affliction of the nervous system, and more particularly, the central nervous system.  
DETD . . . classes of compounds can be used for treating or suppressing the symptoms of conditions related to nervous system affliction, particularly **addictive** disorders. Examples of at least the following classes of compounds are provided for the method of the invention.  
DETD [0118] For treating the **addictive** disorders described herein the drug may also be provided in chewable format, such as a chewing gum. The amount of. . . .  
DETD [0123] **Addictive** disorders and psychoactive substance use disorders, such as intoxication disorders, inhalation disorders, alcohol **addiction**, tobacco **addiction** and/or nicotine **addiction** can be treated according to the invention. Tobacco and nicotine **addiction** would be treated with the goal of achieving either smoking cessation or at least a reduction in the intake of

tobacco and/or nicotine. General descriptions of **addictive** disorders, including disorders related to intoxication, inhalants, and tobacco **addiction** or nicotine **addiction** can be found in many standard sources. The **addictions** and behaviors that can be treated by the invention generally are further described in, for example, The American Psychiatric Press. . . .

DETD . . . other psychoactive substance use disorders such as, for example, disorders related to intoxication or inhalants, more particularly tobacco or nicotine **addiction**. The effect of the invention on tobacco **addiction** more particularly involves the administration of the active agent in a manner and form that reduces the symptoms of the. . . .

CLM What is claimed is:

1. A method of treating or suppressing the symptoms of at least one disorder selected from **addictive** disorders, psychoactive substance use disorders, intoxication disorders, inhalation disorders, alcohol **addiction**, tobacco **addiction**, and nicotine **addiction**, said method comprising the step of administering a therapeutically effective, nontoxic amount of an active agent selected from the group. . . .

. . . method of claim 1 wherein the active agent is used to treat or enhance the treatment of tobacco and/or nicotine **addiction**.

IT **Drug dependence**

IT **Tobacco smoke**

(comps. for the treatment of addictive disorders)

IT 54-11-5, Nicotine 64-17-5, Ethanol, biological studies

(comps. for the treatment of addictive disorders)

IT 81409-90-7, Cabergoline 156907-84-5 170858-36-3 170858-41-0

173590-06-2 179386-43-7 282522-93-4

282522-94-5 369595-93-7 400716-28-1 400716-30-5

400716-32-7

(comps. for the treatment of addictive disorders)

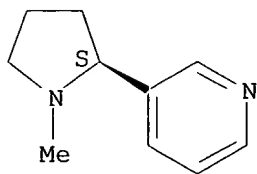
IT 54-11-5, Nicotine 64-17-5, Ethanol, biological studies

(comps. for the treatment of addictive disorders)

RN 54-11-5 USPATFULL

CN Pyridine, 3-[(2S)-1-methyl-2-pyrrolidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 64-17-5 USPATFULL

CN Ethanol (9CI) (CA INDEX NAME)

H<sub>3</sub>C-CH<sub>2</sub>-OH

IT 179386-43-7 282522-93-4 282522-94-5

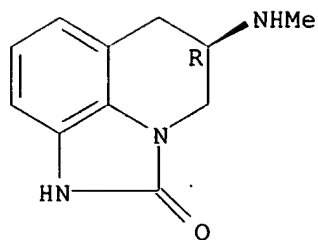
(comps. for the treatment of addictive disorders)

RN 179386-43-7 USPATFULL

CN 4H-Imidazo[4,5,1-ij]quinolin-2(1H)-one, 5,6-dihydro-5-(methylamino)-, (5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

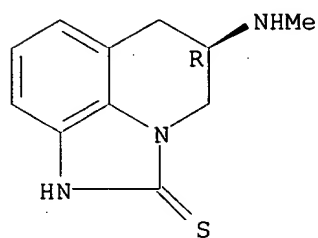




RN 282522-93-4 USPATFULL

CN 4H-Imidazo[4,5,1-ij]quinoline-2(1H)-thione, 5,6-dihydro-5-(methylamino)-,  
(5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 282522-94-5 USPATFULL

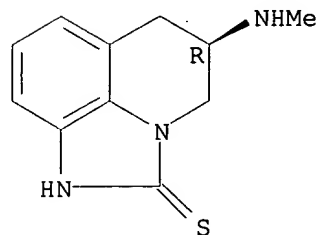
CN 4H-Imidazo[4,5,1-ij]quinoline-2(1H)-thione, 5,6-dihydro-5-(methylamino)-,  
(5R)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 282522-93-4

CMF C11 H13 N3 S

Absolute stereochemistry.



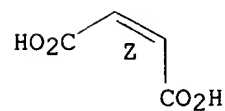
CM 2

CRN 110-16-7

CMF C4 H4 O4

CDES 2:Z

Double bond geometry as shown.

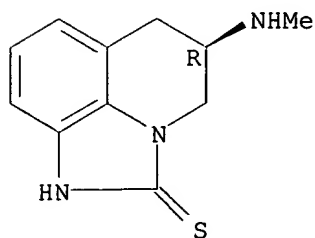


L85 ANSWER 5 OF 8 USPTAFULL on STN  
 AN 2002:8510 USPTAFULL  
 TI Compounds for treating fibromyalgia and chronic fatigue syndrome  
 IN McCall, Robert B., Kalamazoo, MI, UNITED STATES  
 Marshall, Robert Clyde, Mattawan, MI, UNITED STATES  
 Robertson, David W., Galesburg, MI, UNITED STATES  
 Ashley, Thomas M., Portage, MI, UNITED STATES  
 PI US 2002004510 A1 20020110  
 US 6448258 B2 20020910  
 AI US 2001-836660 A1 20010417 (9)  
 PRAI US 2000-198959P 20000421 (60) <--  
 US 2000-200569P 20000428 (60) <--  
 DT Utility  
 FS APPLICATION  
 LREP Austin W. Zhang, Pharmacia & Upjohn Company, Global Intellectual  
 Property, 301 Henrietta Street, Kalamazoo, MI, 49001  
 CLMN Number of Claims: 30  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 766  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The present invention provides for methods for the treatment of  
 fibromyalgia syndrome or chronic fatigue syndrome by the administration  
 of heterocyclic amine-type compounds, substituted phenylazacycloalkane-  
 type compounds, or cabergoline-type compounds, or a salt of any said  
 compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

PRAI US 2000-198959P 20000421 (60) <--  
 PRAI US 2000-200569P 20000428 (60) <--  
 SUMM . . . used medications produce side effects ranging from mild side  
 effects, e.g., drowsiness, dizziness, and nausea to serious side  
 effects, e.g., **addiction** and liver damage.  
 IT **282522-93-4P**, (5R)-5-(Methylamino)-5,6-dihydro-4H-imidazo[4,5,1-  
 ij]quinoline-2(1H)-thione **282522-94-5P**  
 (prepn. of heterocyclic amines for treating fibromyalgia and chronic  
 fatigue syndrome)  
 IT 81409-90-7, Cabergoline 156907-84-5 173590-06-2 **179386-43-7**  
**179386-44-8** 369595-93-7  
 (prepn. of heterocyclic amines for treating fibromyalgia and chronic  
 fatigue syndrome)  
 IT **282522-93-4P**, (5R)-5-(Methylamino)-5,6-dihydro-4H-imidazo[4,5,1-  
 ij]quinoline-2(1H)-thione **282522-94-5P**  
 (prepn. of heterocyclic amines for treating fibromyalgia and chronic  
 fatigue syndrome)  
 RN 282522-93-4 USPTAFULL  
 CN 4H-Imidazo[4,5,1-ij]quinoline-2(1H)-thione, 5,6-dihydro-5-(methylamino)-,  
 (5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 282522-94-5 USPTAFULL  
 CN 4H-Imidazo[4,5,1-ij]quinoline-2(1H)-thione, 5,6-dihydro-5-(methylamino)-,

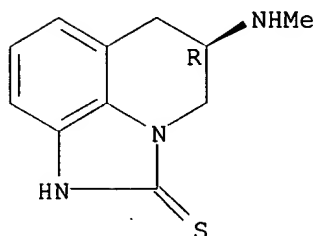
(5R)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 282522-93-4

CMF C11 H13 N3 S

Absolute stereochemistry.



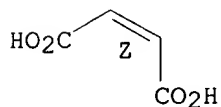
CM 2

CRN 110-16-7

CMF C4 H4 O4

CDES 2:Z

Double bond geometry as shown.



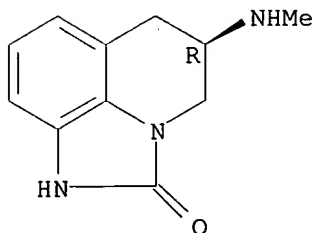
IT 179386-43-7 179386-44-8

(prepn. of heterocyclic amines for treating fibromyalgia and chronic fatigue syndrome)

RN 179386-43-7 USPATFULL

CN 4H-Imidazo[4,5,1-ij]quinolin-2(1H)-one, 5,6-dihydro-5-(methylamino)-, (5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 179386-44-8 USPATFULL

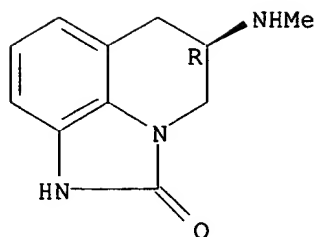
CN 4H-Imidazo[4,5,1-ij]quinolin-2(1H)-one, 5,6-dihydro-5-(methylamino)-, (5R)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 179386-43-7

CMF C11 H13 N3 O

Absolute stereochemistry. Rotation (-).



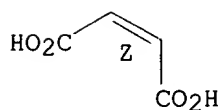
CM 2

CRN 110-16-7

CMF C4 H4 O4

CDES 2:Z

Double bond geometry as shown.



L85 ANSWER 6 OF 8 USPAT2 on STN  
 AN 2002:259436 USPAT2  
 TI Compounds for treating fibromyalgia and chronic fatigue syndrome  
 IN McCall, Robert B., Kalamazoo, MI, United States  
 Marshall, Robert Clyde, Mattawan, MI, United States  
 Robertson, David W., Galesburg, MI, United States  
 Ashley, Thomas M., Portage, MI, United States  
 PA Pharmacia & Upjohn Company, Kalamazoo, MI, United States (U.S. corporation)  
 PI US 6555548 B2 20030429  
 AI US 2002-159913 20020530 (10)  
 RLI Division of Ser. No. US 2001-836660, filed on 17 Apr 2001, now patented, Pat. No. US 6448258  
 PRAI US 2000-198959P 20000421 (60) <--  
 US 2000-200569P 20000428 (60) <--  
 DT Utility  
 FS GRANTED  
 EXNAM Primary Examiner: Spivack, Phyllis G.  
 LREP Zhang, Austin W.  
 CLMN Number of Claims: 4  
 ECL Exemplary Claim: 1  
 DRWN 0 Drawing Figure(s); 0 Drawing Page(s)  
 LN.CNT 635  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The present invention provides for methods for the treatment of fibromyalgia syndrome or chronic fatigue syndrome by the administration of cabergoline-type compounds or a salt of said compound.  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 PRAI US 2000-198959P 20000421 (60) <--  
 PRAI US 2000-200569P 20000428 (60) <--  
 SUMM . . . used medications produce side effects ranging from mild side effects, e.g., drowsiness, dizziness, and nausea to serious side effects, e.g., **addiction** and liver damage  
 IT **282522-93-4P**, (5R)-5-(Methylamino)-5,6-dihydro-4H-imidazo[4,5,1-ij]quinoline-2(1H)-thione **282522-94-5P**

(prepn. of heterocyclic amines for treating fibromyalgia and chronic fatigue syndrome)  
IT 81409-90-7, Cabergoline 156907-84-5 173590-06-2 **179386-43-7**  
**179386-44-8** 369595-93-7  
(prepn. of heterocyclic amines for treating fibromyalgia and chronic fatigue syndrome)  
IT **282522-93-4P**, (5R)-5-(Methylamino)-5,6-dihydro-4H-imidazo[4,5,1-  
ij]quinoline-2(1H)-thione **282522-94-5P**  
(prepn. of heterocyclic amines for treating fibromyalgia and chronic fatigue syndrome)

=> d 185 bib abs kwic hitrn 7 8

L85 ANSWER 7 OF 8 USPAT2 on STN

AN 2002:99494 USPAT2

TI Diphenyl ether compounds useful in therapy

IN Andrews, Mark David, Kent, UNITED KINGDOM

Hepworth, David, Kent, UNITED KINGDOM

Middleton, Donald Stuart, Kent, UNITED KINGDOM

Stobie, Alan, Kent, UNITED KINGDOM

PA Pfizer Inc., New York, NY, United States (U.S. corporation)

PI US 6448293 B2 20020910

AI US 2001-810378 20010316 (9)

PRAI GB 2000-7884 20000331 <--

US 2000-197127P 20000414 (60) <--

DT Utility

FS GRANTED

EXNAM Primary Examiner: Gerstl, Robert

LREP Richardson, Peter C., Ginsburg, Paul H., Appleman, Jolene W.

CLMN Number of Claims: 28

ECL Exemplary Claim: 1

DRWN 0 Drawing Figure(s); 0 Drawing Page(s)

LN.CNT 4240

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A compound of general formula (I), or pharmaceutically acceptable salts, solvates or polymorphs thereof; wherein; R.sup.1 and R.sup.2, which may be the same or different, are hydrogen, C.sub.1-C.sub.6alkyl, (CH.sub.2).sub.m (C.sub.3-C.sub.6cycloalkyl) wherein m =0, 1, 2 or 3, or R.sup.1 and R.sup.2 together with the nitrogen to which they are attached form an azetidine ring; each R.sup.3 is independently CF.sub.3, OCF.sub.3, C.sub.1-4alkylthio or C.sub.1-C.sub.4alkoxy; n is 1, 2 or 3; and R.sup.4 and R.sup.5, which may be the same or different, are: A--X, wherein A =--CH=CH-- or --(CH.sub.2)p-- where p is 0, 1 or 2; X is hydrogen, F, Cl, Br, I, CONR.sup.6R.sup.7, SO.sub.2NR.sup.6R.sup.7, SO.sub.2NHC(=O)R.sup.6, OH, C.sub.1-4alkoxy, NR.sup.8SO.sub.2R.sup.9, NO.sub.2, NR.sup.6R.sup.11, CN, CO.sub.2R.sup.10, CHO, SR.sup.10, S(O)R.sup.9 or SO.sub.2R.sup.10; R.sup.6, R.sup.7, R.sup.8 and R.sup.10 which may be the same or different, are hydrogen or C.sub.1-6alkyl optionally substituted independently by one or more R.sup.12; R.sup.9 is C.sub.1-6 alkyl optionally substituted independently by one or more R.sup.12; R.sup.11 is hydrogen, C.sub.1-6 alkyl optionally substituted independently by one or more R.sup.12, C(O)R.sup.6, CO.sub.2R.sup.9, C(O)NHR.sup.6 or SO.sub.2NR.sup.6R.sup.7; R.sup.12 is F, OH, CO.sub.2H, C.sub.3-6cycloalkyl, NH.sub.2, CONH.sub.2, C.sub.1-6alkoxy, C.sub.1-6alkoxycarbonyl or a 5- or 6-membered heterocyclic ring containing 1, 2 or 3 heteroatoms selected from N, S and O optionally substituted independently by one or more R.sup.13; or R.sup.6 and R.sup.7, together with the nitrogen to which they are attached, form a 4-, 5- or 6-membered heterocyclic ring optionally substituted independently by one or more R.sup.13; or a 5- or 6-membered

heterocyclic ring containing 1, 2 or 3 heteroatoms selected from N, S and O, optionally substituted independently by one or more R.sup.13; wherein R.sup.13 is hydroxy, C.sub.1-C.sub.4alkoxy, F, C.sub.1-C.sub.6alkyl, haloalkyl, haloalkoxy, --NH.sub.2, --NH(C.sub.1-C.sub.6alkyl) or --N(C.sub.1-C.sub.6alkyl).sub.2; wherein when R.sup.1 and R.sup.2 are methyl, R.sup.4 and R.sup.5 are hydrogen and n is 1, R.sup.3 is not a --SMe group para to the ether linkage linking rings A and B. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

PRAI GB 2000-7884 20000331 <--  
 PRAI US 2000-197127P 20000414 (60) <--  
 SUMM . . . posttraumatic stress syndrome, avoidant personality disorder, premature ejaculation, eating disorders (e.g. anorexia nervosa and bulimia nervosa), obesity, chemical dependencies (e.g. **addictions** to alcohol, cocaine, heroin, phenobarbital, nicotine and benzodiazepines), cluster headache, migraine, pain, Alzheimers disease, obsessive-compulsive disorder, panic disorder, memory disorders. . . .  
 SUMM Dopamine D2 agonists (e.g. Premiprival, Pharmacia Upjohn compound number **PNU95666**);  
 IT **Drugs of abuse**  
 (abuse of, treatment; prepn. of di-Ph ether compds. as serotonin re-uptake inhibitors)

L85 ANSWER 8 OF 8 USPAT2 on STN

AN 2002:8510 USPAT2  
 TI Treating fibromyalgia and chronic fatigue syndrome  
 IN McCall, Robert B., Kalamazoo, MI, United States  
 Marshall, Robert Clyde, Mattawan, MI, United States  
 Robertson, David W., Galesburg, MI, United States  
 Ashley, Thomas M., Portage, MI, United States  
 PA Pharmacia & Upjohn Company, Kalamazoo, MI, United States (U.S. corporation)  
 PI US 6448258 B2 20020910  
 AI US 2001-836660 20010417 (9)  
 PRAI US 2000-198959P 20000421 (60) <--  
 US 2000-200569P 20000428 (60) <--  
 DT Utility  
 FS GRANTED  
 EXNAM Primary Examiner: Spivack, Phyllis G.  
 LREP Zhang, Austin W.  
 CLMN Number of Claims: 14  
 ECL Exemplary Claim: 1  
 DRWN 0 Drawing Figure(s); 0 Drawing Page(s)  
 LN.CNT 682

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides for methods for the treatment of fibromyalgia syndrome or chronic fatigue syndrome by the administration of heterocyclic amine-type compounds or a salt of any said compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

PRAI US 2000-198959P 20000421 (60) <--  
 PRAI US 2000-200569P 20000428 (60) <--  
 SUMM . . . used medications produce side effects ranging from mild side effects, e.g., drowsiness, dizziness, and nausea to serious side effects, e.g., **addiction** and liver damage.  
 IT **282522-93-4P**, (5R)-5-(Methylamino)-5,6-dihydro-4H-imidazo[4,5,1-ij]quinoline-2(1H)-thione **282522-94-5P**  
 (prepn. of heterocyclic amines for treating fibromyalgia and chronic fatigue syndrome)  
 IT 81409-90-7, Cabergoline 156907-84-5 173590-06-2 **179386-43-7**  
**179386-44-8** 369595-93-7

(prepn. of heterocyclic amines for treating fibromyalgia and chronic fatigue syndrome)  
IT 282522-93-4P, (5R)-5-(Methylamino)-5,6-dihydro-4H-imidazo[4,5,1-ij]quinoline-2(1H)-thione 282522-94-5P  
(prepn. of heterocyclic amines for treating fibromyalgia and chronic fatigue syndrome)  
IT 179386-43-7 179386-44-8  
(prepn. of heterocyclic amines for treating fibromyalgia and chronic fatigue syndrome)

=> d his

(FILE 'HOME' ENTERED AT 09:13:29 ON 28 JUL 2003)  
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 09:13:44 ON 28 JUL 2003  
L1 1 S US20020049206/PN  
SEL RN

FILE 'REGISTRY' ENTERED AT 09:14:01 ON 28 JUL 2003  
L2 14 S E1-E14  
L3 3 S L2 AND NCNC2-NC5-C6/ES  
L4 38 S (179386-43-7 OR 282522-93-4)/CRN  
L5 1 S MALEIC ACID/CN  
L6 1 S 2-BUTENEDIOIC ACID/CN  
L7 2 S C4H4O4 AND L4  
L8 4 S L3,L7

FILE 'HCAPLUS' ENTERED AT 09:23:46 ON 28 JUL 2003  
L9 26 S L8  
L10 17 S (PNU OR U)() (95666 OR 95666E OR 95() (666 OR 666E OR 666 "E"))  
L11 30 S L9,L10  
L12 1 S L11 AND ADDICT?  
E DRUG DEPENDENCE/CT  
L13 8194 S E3,E4  
E E3+ALL  
L14 11975 S E3+NT  
E E10+ALL  
L15 40766 S E4,E3+NT  
E SUBSTANCE ABUSE/CT  
E E3+ALL  
L16 2052 S E2  
E ADDICTION/CT  
E WITHDRAWAL/CT  
E TOBACCO/CT  
E TOBACCO SMOKE/CT  
L17 16079 S E3-E9  
E E6+ALL  
L18 8814 S E1  
E E2+ALL  
L19 7652 S E2,E1+NT  
E ALCOHOLISM/CT  
L20 3450 S E3  
E E3+ALL  
L21 1072 S E5  
L22 2 S L11 AND L13-L21  
L23 1 S L22 NOT RESTLESS LEG

FILE 'REGISTRY' ENTERED AT 09:29:42 ON 28 JUL 2003  
L24 2 S (NICOTINE OR ETHANOL)/CN

FILE 'HCAPLUS' ENTERED AT 09:29:49 ON 28 JUL 2003

L25 1 S L24 AND L11  
E ANDERSON R/AU  
L26 324 S E3,E44-E46  
E ANDERSON RICH/AU  
L27 54 S E4  
L28 29 S E51-E53  
E MCBRINN S/AU  
L29 2 S E5,E6  
E MC BRINN S/AU  
E MCBRIN S/AU  
E ROBERTSON D/AU  
L30 135 S E3,E31  
L31 148 S E51  
L32 166 S E76-E78  
E MARSHALL R/AU  
L33 233 S E3,E8  
E MARCHAL ROB/AU  
E MARSHALL ROB/AU  
L34 163 S E4,E8-E10  
L35 3 S L11 AND L26-L34  
L36 3 S L1,L12,L23,L35  
L37 20 S L11 AND (PD<=20000816 OR PRD<=20000816 OR AD<=20000816)

FILE 'REGISTRY' ENTERED AT 09:34:57 ON 28 JUL 2003

L38 STR  
L39 5 S L38  
L40 319 S L38 FUL  
SAV L40 VKIM929/A TEMP  
L41 STR L38  
L42 7 S L41 SAM SUB=L40  
L43 STR L41  
L44 2 S L43 SAM SUB=L40  
L45 STR L43  
L46 5 S L45 SAM SUB=L40  
L47 52 S L43 FUL SUB=L40  
L48 67 S L45 FUL SUB=L40  
SAV TEMP L47 VKIM929A/A  
SAV TEMP L48 VKIM929B/A  
L49 119 S L47,L48  
L50 315 S L40 NOT L8

FILE 'HCAPLUS' ENTERED AT 09:50:30 ON 28 JUL 2003

L51 63 S L50  
L52 0 S L51 AND ADDICT?  
L53 2 S L51 AND L13-L21  
L54 2 S L51 AND L24  
L55 4 S L53,L54  
L56 2 S L55 AND (COCAIN? OR CANNABI?)  
L57 0 S L51 AND L26-L34  
L58 17 S L51 AND (ABUS? OR WITHDRAW? OR ?TOLER? OR DEPEND? OR INTOX? O  
L59 5 S L36,L56

FILE 'REGISTRY' ENTERED AT 09:55:02 ON 28 JUL 2003

FILE 'HCAPLUS' ENTERED AT 09:55:37 ON 28 JUL 2003

FILE 'REGISTRY' ENTERED AT 09:56:16 ON 28 JUL 2003

L60 1 S L2 AND CABER?  
L61 2 S 81409-90-7/CRN

FILE 'HCAPLUS' ENTERED AT 09:57:56 ON 28 JUL 2003

L62 207 S L60 OR L61  
L63 245 S CABERGOLIN? OR CABASER# OR DOSTINEX OR GALASTOP# OR SOGILEN#



L64 257 S L62,L63  
L65 3 S L64 AND ADDICT?  
L66 7 S L64 AND L13-L21  
L67 6 S L64 AND L24  
L68 12 S L65-L67

SEL DN AN 4 6 8  
L69 3 S E1-E9 AND L68  
SEL HIT RN

FILE 'REGISTRY' ENTERED AT 10:01:58 ON 28 JUL 2003  
L70 3 S E10-E12

FILE 'REGISTRY' ENTERED AT 10:02:03 ON 28 JUL 2003

FILE 'HCAPLUS' ENTERED AT 10:02:21 ON 28 JUL 2003

FILE 'BIOSIS' ENTERED AT 10:02:34 ON 28 JUL 2003  
L71 10 S L11

FILE 'MEDLINE' ENTERED AT 10:03:18 ON 28 JUL 2003  
L72 6 S L11

FILE 'EMBASE' ENTERED AT 10:03:40 ON 28 JUL 2003  
L73 11 S L11

FILE 'USPATFULL, USPAT2' ENTERED AT 10:04:12 ON 28 JUL 2003  
L74 47 S L11

L75 11 S L74 AND ADDICT?  
L76 3 S L74 AND L24

E TOBACCO/CT  
L77 0 S L74 AND E3  
L78 0 S L74 AND E31  
L79 2 S L74 AND E35,E36  
E DRUG DEPENDENCE/CT

L80 3 S L74 AND E3,E11

L81 0 S L74 AND E14

L82 5 S L74 AND E18

L83 14 S L75-L82

L84 26 S L74 AND (PD<=20000816 OR PRD<=20000816)

L85 8 S L83 AND L84

L86 18 S L84 NOT L85

FILE 'USPATFULL, USPAT2' ENTERED AT 10:07:45 ON 28 JUL 2003